1990 ALBERTA HOUSE COST COMPARISON STUDY

Single Detached Dwelling

Alberta
MUNICIPAL AFFAIRS
Housing Division

1990 ALBERTA HOUSE COST COMPARISON STUDY

SINGLE DETACHED DWELLING

OCTOBER 1990

Prepared by :

Fairbrother Bennett Ltd.
Suite 630, Atrium II
840 - 6th Avenue SW
Calgary, Alberta
T2P 3E5

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Prepared for :

Alberta Municipal Affairs
Housing Division
Research and Technical Support Section
16th Floor, CityCentre
10155 - 102nd Street
Edmonton, Alberta
T5J 4L4

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PREFACE

The purpose of the 1990 Alberta House Cost Comparison Study is to estimate the hard construction costs of a typical single detached house and a 24-unit walkup apartment building in ten urban centres across the Province.

The study also compares the current 1990 construction costs with those of previous years in the selected urban centres. Emphasis is given to comparing 1990 costs with 1989 costs and the study includes an analysis of the differences.

The study was carried out by the firm of Fairbrother Bennett Ltd. and is documented in three reports:

1990 Alberta House Cost Comparison Study:	Executive Summary
1990 Alberta House Cost Comparison Study:	Single Detached Dwelling
1990 Aiberta House Cost Comparison Study:	24 Unit Walkup Apartment

Additional copies of any of these reports can be ordered from

ALBERTA MUNICIPAL AFFAIRS
Housing Division
Research and Technical Support Section
16th Floor, CityCentre
10155 - 102nd Street
Edmonton, Alberta
T5J 4L4

Telephone (403) 427-8150

1.0 INTRODUCTION

1.0 INTRODUCTION

1.1 Objectives

The objectives of the 1990 Alberta House Cost Comparison Study were:

1. To determine 1990 hard residential construction costs in ten selected urban centres in Alberta.
2. To determine reasons for differences in residential construction costs in the selected centres.
3. To carry out detailed comparisons of 1990 costs with 1989 costs in each centre.
4. To determine and comment upon residential construction cost trends over the last ten years in each centre.

1.2 Scope of Work

The 1990 Study examined the construction costs of a typical single detached house and a 24 unit walkup apartment building.

The study has been documented in three reports:

1990 Alberta House Cost Comparison Study: Executive Summary

1990 Alberta House Cost Comparison Study: Single Detached Dwelling

1990 Alberta House Cost Comparison Study: 24 Unit Walkup Apartment

This report deals with the single detached house - a four level split, lower floor unfinished; vinyl siding; asphalt shingle roof; attached double garage.

1.2 Scope Of Work - (continued)

The study examined construction costs in the following urban centres:

1. Calgary
2. Edmonton
3. Fort McMurray
4. Grande Prairie
5. Hinton
6. Lethbridge
7. Lloydminster
8. Medicine Hat
9. Peace River
10. Red Deer

The cost analyses of both buildings examined the construction cost differences between each of the centres and identified reasons for these differences with reference to such factors as:

a) material costs,

b) labour costs,

c) building features and inclusions,

d) construction specifications,

e) recent market activity and

f) other local factors as appropriate.

1.0 INTRODUCTION

1.2 Scope Of Work - (continued)

The estimates of the single detached house for each centre include all structural, finishing, mechanical and electrical work as shown and specified on the drawings. They also include allowances for site overhead. Costs have not been included for the following items:

a) land cost and site clearance,
b) site servicing,
c) site development,
d) design fees and disbursements,
e) legal fees and disbursements,
f) marketing and real estate fees,
g) financing costs,
h) appliances (stove and refrigerator) and
i) general contractor's overhead and profit.

1.3 Drawings

The drawings of the single detached house are:

1. Basement/foundation plan and main/upper floor plan.
2. Building elevations.
3. Building sections and specifications.

Reduced copies of these drawings are attached as an Appendix.

1.0 INTRODUCTION

1.4 Approach

Costs are provided in this report under the headings of "Labour Item Cost" and "Material/Equipment Item Cost". The breakdowns between labour and material/ equipment costs have been generally provided by the applicable trade contractors. When these have been unattainable the labour costs have been determined by using labour rates established by the trade union concerned, or by the current market where trade union rates do not apply (the majority of cases). In all cases, realistic assessments have been made of current labour rates by examining the circumstances of the particular sub-trade involved. Material prices have been evaluated from discounted building material suppliers' lists and by competitive price quotations from trade contractors.

Prior to 1988 the single detached house had been a 100 square metre (1,076 sq.ft.) bungalow. In 1988 the design was updated to a four level split dwelling of 151 square metres (1,625 sq.ft.) finished on three levels and complete with an attached double garage. This was done so as to better represent current trends in the residential construction industry. Previous years' costs have been revised to accommodate this change and thus enable trends from earlier studies to remain applicable.

Cost data are assembled by sub-trade and presented in 21 trade categories plus a category for site overhead. The sub-trade operations are combined within each trade in order to reflect industry estimating practice.

All cost data, tabulations and graphs were processed on a micro-computer.

The cost effects of market forces and residential construction industry conditions are addressed in Section 3.0 "Commentary".

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 1 : TOTAL BUILDING COSTS (OCTOBER 1990 DOLLARS)

ITEM	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
Labour	$25,899	$24,394	$27,048	$25,751	$26,972	$24,266	$22,615	$24,139	$26,598	$24,445
%	30.4%	29.7%	29.5%	29.1%	30.7%	28.7%	27.3%	28.6%	29.3%	29.3%
Material	$59,276	$57,799	$64,524	$62,793	$60,991	$60,224	$60,102	$60,308	$64,118	$59,056
%	69.6%	70.3%	70.5%	70.9%	69.3%	71.3%	72.7%	71.4%	70.7%	70.7%
Total	$85,175	$82,193	$91,572	$88,544	$87,963	$84,490	$82,717	$84,447	$90,716	$83,501
Cost / m2	$564.07	$544.32	$606.44	$586.38	$582.54	$559.53	$547.79	$559.25	$600.77	$552.99
Cost / sq.ft.	$52.40	$50.57	$56.34	$54.48	$54.12	$51.98	$50.89	$51.96	$55.81	$51.37
1989										
Cost / sq.ft.	$49.88	$47.12	$54.08	$52.01	$50.87	$49.42	$48.59	$49.80	$52.53	$49.72
Total	$81,077	$76,582	$87,896	$84,533	$82,681	$80,327	$78,972	$80,946	$85,378	$80,810
% Change from 1989	5:1%	7.3%	4.2%	4.7%	6.4%	5.2%	4.7%	4.3%	6.3%	3.3%

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 2 : COMPARATIVE COST RATIOS

LOCATION	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
CALGARY	1.00	0.96	1.08	1.04	1.03	0.99	0.97	0.99	1.07	0.98
EDMONTON	1.04	1.00	1.11	1.08	1.07	1.03	1.01	1.03	1.10	1.02
FORT McMURRAY	0.93	0.90	1.00	0.97	0.96	0.92	0.90	0.92	0.99	0.91
GRANDE PRAIRIE	0.96	0.93	1.03	1.00	0.99	0.95	0.93	0.95	1.02	0.94
HINTON	0.97	0.93	1.04	1.01	1.00	0.96	0.94	0.96	1.03	0.95
LETHBRIDGE	1.01	0.97	1.08	1.05	1.04	1.00	0.98	1.00	1.07	0.99
LLOYD-MINSTER	1.03	0.99	1.11	1.07	1.06	1.02	1.00	1.02	1.10	1.01
MEDICINE HAT	1.01	0.97	1.08	1.05	1.04	1.00	0.98	1.00	1.07	0.99
PEACE RIVER	0.94	0.91	1.01	0.98	0.97	0.93	0.91	0.93	1.00	0.92
RED DEER	1.02	0.98	1.10	1.06	1.05	1.01	0.99	1.01	1.09	1.00

NOTE The ratios represent the cost in a city in the top row of the table divided by the cost in a city in the left hand column. For example, costs in Grande Prairie are 1.05 times costs in Medicine Hat.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 3 : COMPARATIVE COSTS 1989 - 1990

ITEM	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
Labour										
1990	$25,899	$24,394	$27,048	$25,751	$26,972	$24,266	$22,615	$24,139	$26,598	$24,445
1989	$23,993	$22,264	$25,307	$24,131	$24,865	$22,550	$20,876	$22,762	$24,604	$23,826
Difference	$1,906	$2,130	$1,741	$1,620	$2,107	$1,716	$1,739	$1,377	$1,994	$619
% Difference	7.9%	9.6%	6.9%	6.7%	8.5%	7.6%	8.3%	6.0%	8.1%	2.6%
Material										
1990	$59,276	$57,799	$64,524	$62,793	$60,991	$60,224	$60,102	$60,308	$64,118	$59,056
1989	$57,084	$54,318	$62,589	$60,402	$57,816	$57,777	$58,096	$58,184	$60,774	$56,984
Difference	$2,192	$3,481	$1,935	$2,391	$3,175	$2,447	$2,006	$2,124	$3,344	$2,072
% Difference	3.8%	6.4%	3.1%	4.0%	5.5%	4.2%	3.5%	3.7%	5.5%	3.6%
Total										
1990	$85,175	$82,193	$91,572	$88,544	$87,963	$84,490	$82,717	$84,447	$90,716	$83,501
1989	$81,077	$76,582	$87,896	$84,533	$82,681	$80,327	$78,972	$80,946	$85,378	$80,810
Difference	$4,098	$5,611	$3,676	$4,011	$5,282	$4,163	$3,745	$3,501	$5,338	$2,691
% Difference	5.1%	7.3%	4.2%	4.7%	6.4%	5.2%	4.7%	4.3%	6.3%	3.3%

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD.4 : COMPARATIVE COSTS BAR CHART 1989 - 1990

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 5 : COMPARATIVE TOTAL BUILDING COSTS 1981 - 1990 (NOMINAL DOLLARS)

YEAR	AVERAGE	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
1981	$67,692	$63,336	$63,888	$77,357	$71,449		$67,057		$66,506		$64,249
1982	$65,632	$59,030	$60,374	$74,016	$65,145	$67,935	$66,489		$67,367		$64,697
1983	$61,713	$55,930	$57,170	$68,848	$64,732	$63,491	$61,493		$62,923		$59,116
1984	$63,646	$56,877	$57,256	$72,242	$68,194	$66,316	$62,010	$67,798	$63,629		$58,496
1985	$64,852	$59,754	$59,633	$72,913	$68,469	$66,661	$63,181	$68,400	$63,250		$61,407
1986	$67,405	$61,803	$62,079	$76,445	$71,932	$70,209	$65,231	$69,692	$65,524		$63,733
1987	$74,644	$74,588	$67,421	$84,110	$77,854	$75,871	$71,516	$74,913	$72,150		$73,369
1988	$77,974	$76,851	$71,666	$85,137	$81,050	$78,542	$76,031	$76,401	$76,232	$82,080	$75,754
1989	$81,920	$81,077	$76,582	$87,896	$84,533	$82,681	$80,327	$78,972	$80,946	$85,378	$80,810
1990	$86,132	$85,175	$82,193	$91,572	$88,544	$87,963	$84,490	$82,717	$84,447	$90,716	$83,501

Notes

1. Hinton was not included in the 1981 study.
2. Lloydminster was not included in the 1981 - 83 studies.
3. Peace River was included from 1988.
4. Costs for years prior to 1988 have been adjusted from the bungalow design to the current 4-level split design.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 6 : COMPARATIVE TOTAL BUILDING COSTS 1981 - 1990 (INFLATION-ADJUSTED DOLLARS)

YEAR	AVERAGE	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
1981	$102,134	$95,003	$96,922	$117,355	$108,392		$100,585		$99,758		$96,924
1982	$89,019	$79,057	$82,663	$101,342	$89,196	$93,016	$89,047		$90,223		$87,612
1983	$79,568	$71,749	$73,985	$89,098	$83,771	$82,165	$78,885		$80,720		$76,170
1984	$80,000	$71,184	$72,148	$91,032	$85,931	$83,565	$77,608	$85,432	$79,634		$73,461
1985	$79,120	$72,677	$72,884	$89,115	$83,684	$81,474	$76,845	$83,599	$76,929		$74,870
1986	$79,552	$72,627	$73,450	$90,447	$85,108	$83,069	$76,656	$82,457	$77,000		$75,151
1987	$84,661	$84,443	$76,555	$95,505	$88,402	$86,150	$80,965	$85,062	$81,682		$83,186
1988	$86,068	$84,717	$79,159	$94,038	$89,524	$86,754	$83,813	$84,389	$84,035	$90,662	$83,592
1989	$86,785	$86,104	$81,024	$92,994	$89,436	$87,476	$85,307	$83,552	$85,965	$90,330	$85,659
1990	$86,132	$85,175	$82,193	$91,572	$88,544	$87,963	$84,490	$82,717	$84,447	$90,716	$83,501

Notes

1. Hinton was not included in the 1981 study.
2. Lloydminster was not included in the 1981 - 83 studies.
3. Peace River was included from 1988.
4. Costs for years prior to 1988 have been adjusted from the bungalow design to the current 4-level split design.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 7 : COMPARATIVE SQUARE FOOT UNIT COSTS 1981 - 1990 (NOMINAL DOLLARS)

YEAR	AVERAGE	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
1981	$41.65	$38.97	$39.31	$47.59	$43.96		$41.26		$40.92		$39.53
1982	$40.38	$36.32	$37.15	$45.54	$40.08	$41.80	$40.91		$41.45		$39.80
1983	$37.97	$34.41	$35.17	$42.36	$39.83	$39.06	$37.83		$38.71		$36.37
1984	$39.16	$34.99	$35.23	$44.45	$41.96	$40.80	$38.15	$41.71	$39.15		$35.99
1985	$39.90	$36.76	$36.69	$44.86	$42.13	$41.01	$38.87	$42.08	$38.91		$37.78
1986	$41.47	$38.02	$38.19	$47.03	$44.26	$43.20	$40.13	$42.88	$40.3[illegible]		$39.21
1987	$45.92	$45.89	$41.48	$51.75	$47.90	$46.68	$44.00	$46.09	$44.39		$45.14
1988	$47.97	$47.28	$44.09	$52.38	$49.87	$48.32	$46.78	$47.01	$46.90	$50.50	$46.61
1989	$50.40	$49.88	$47.12	$54.08	$52.01	$50.87	$49.42	$48.59	$49.80	$52.53	$49.72
1990	$52.99	$52.40	$50.57	$56.34	$54.48	$54.12	$51.98	$50.89	$51.96	$55.81	$51.37

Notes

1. Hinton was not included in the 1981 study.
2. Lloydminster was not included in the 1981 - 83 studies.
3. Peace River was included from 1988.
4. Costs for years prior to 1988 have been adjusted from the bungalow design to the current 4-level split design.

2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 8 : COMPARATIVE SQUARE FOOT UNIT COSTS 1981 - 1990 (INFLATION-ADJUSTED DOLLARS)

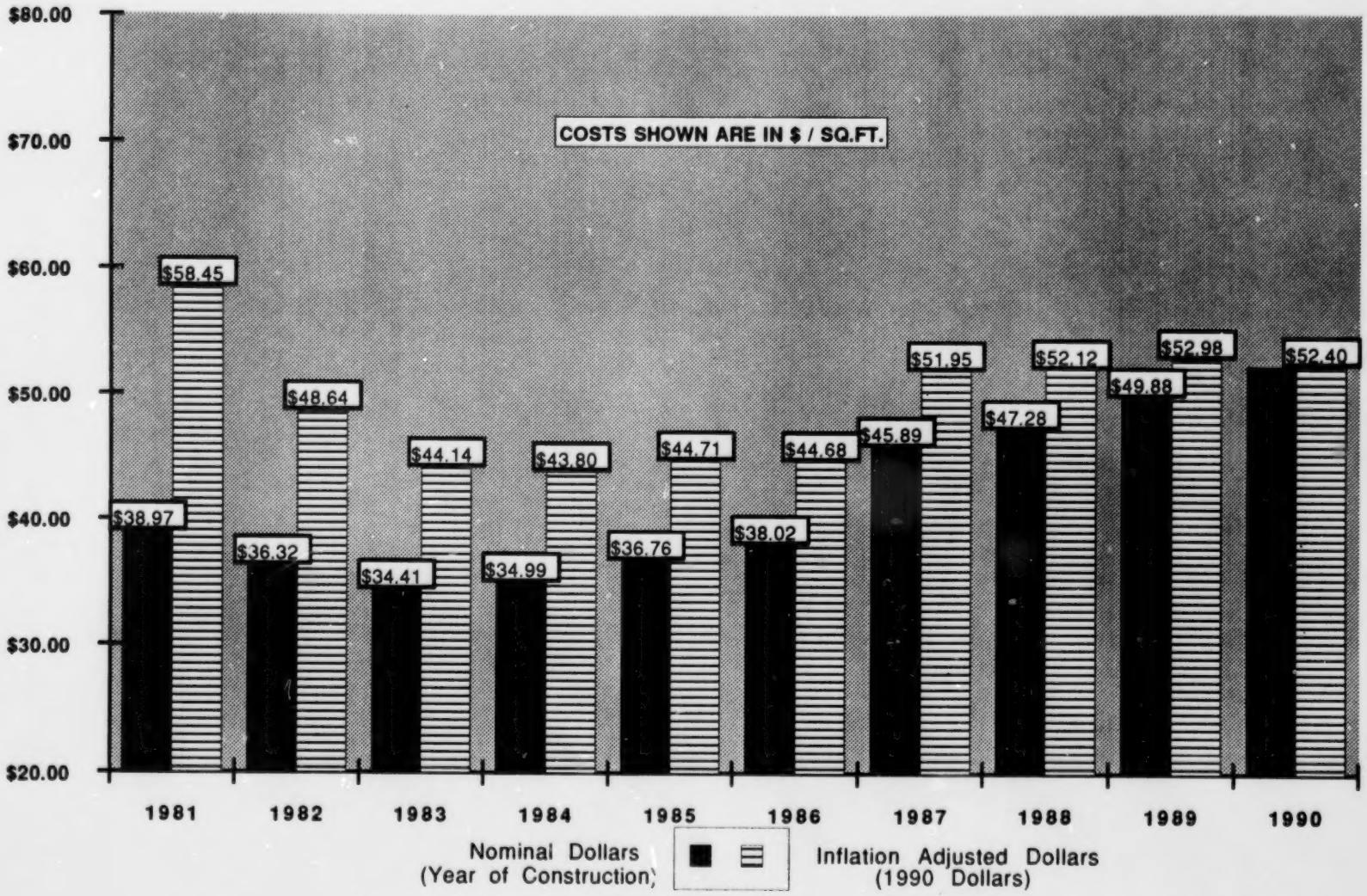
YEAR	AVERAGE	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
1981	$62.84	$58.45	$59.63	$72.20	$66.69		$61.88		$61.38		$59.63
1982	$54.77	$48.64	$50.86	$62.35	$54.88	$57.23	$54.79		$55.51		$53.90
1983	$48.95	$44.14	$45.52	$54.82	$51.54	$50.55	$48.53		$49.66		$46.86
1984	$49.22	$43.80	$44.39	$56.01	$52.87	$51.41	$47.75	$52.56	$49.00		$45.20
1985	$48.68	$44.71	$44.84	$54.83	$51.49	$50.13	$47.28	$51.43	$47.33		$46.06
1986	$48.94	$44.68	$45.19	$55.65	$52.36	$51.11	$47.16	$50.73	$47.37		$46.24
1987	$52.09	$51.95	$47.10	$58.76	$54.39	$53.00	$49.81	$52.33	$50.26		$51.18
1988	$52.95	$52.12	$48.70	$57.86	$55.08	$53.38	$51.57	$51.92	$51.70	$55.78	$51.43
1989	$53.39	$52.98	$49.85	$57.21	$55.03	$53.82	$52.49	$51.41	$52.89	$55.58	$52.70
1990	$52.99	$52.40	$50.57	$56.34	$54.48	$54.12	$51.98	$50.89	$51.96	$55.81	$51.37

Notes

1. Hinton was not included in the 1981 study.
2. Lloydminster was not included in the 1981 - 83 studies.
3. Peace River was included from 1988.
4. Costs for years prior to 1988 have been adjusted from the bungalow design to the current 4-level split design.

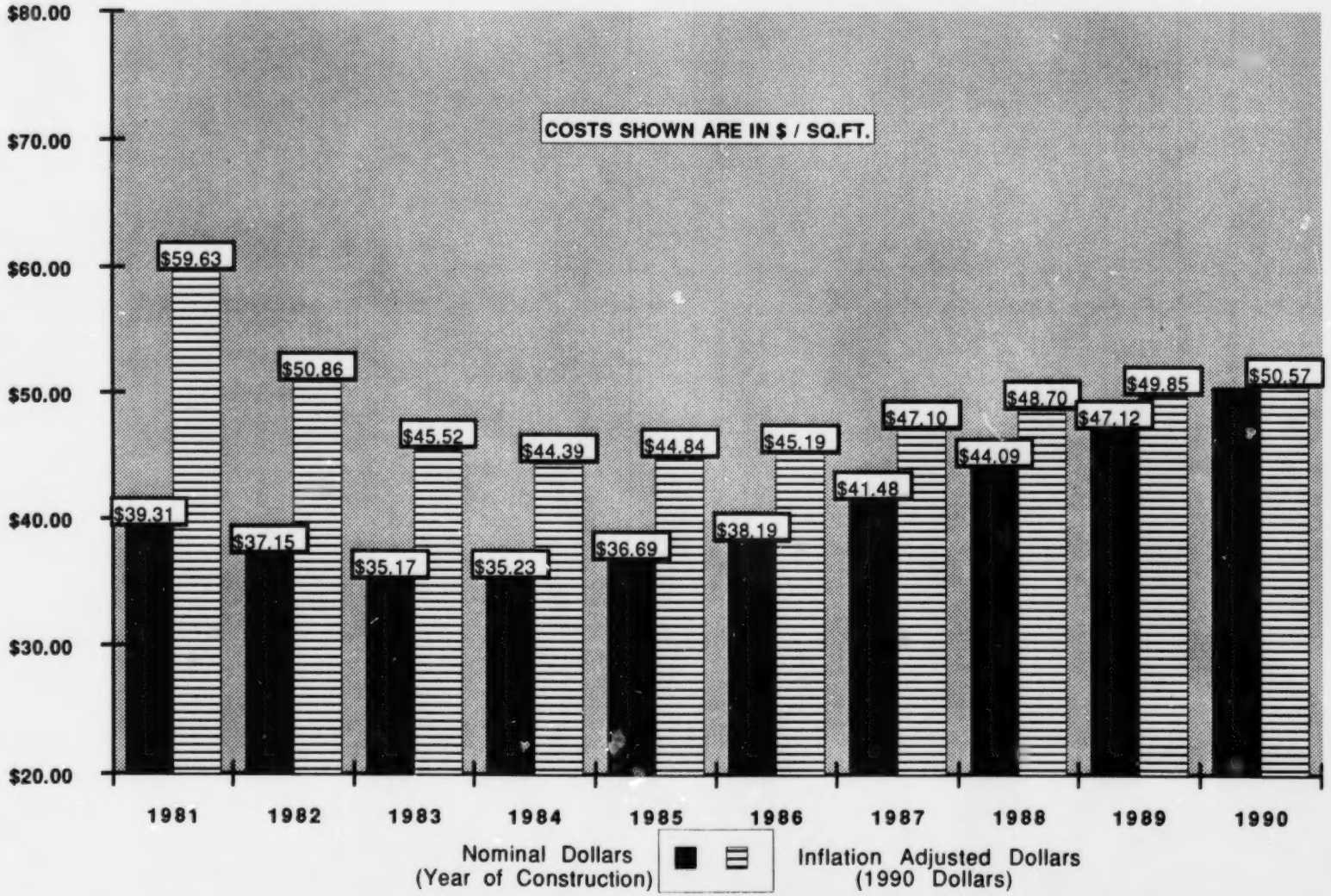
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : CALGARY



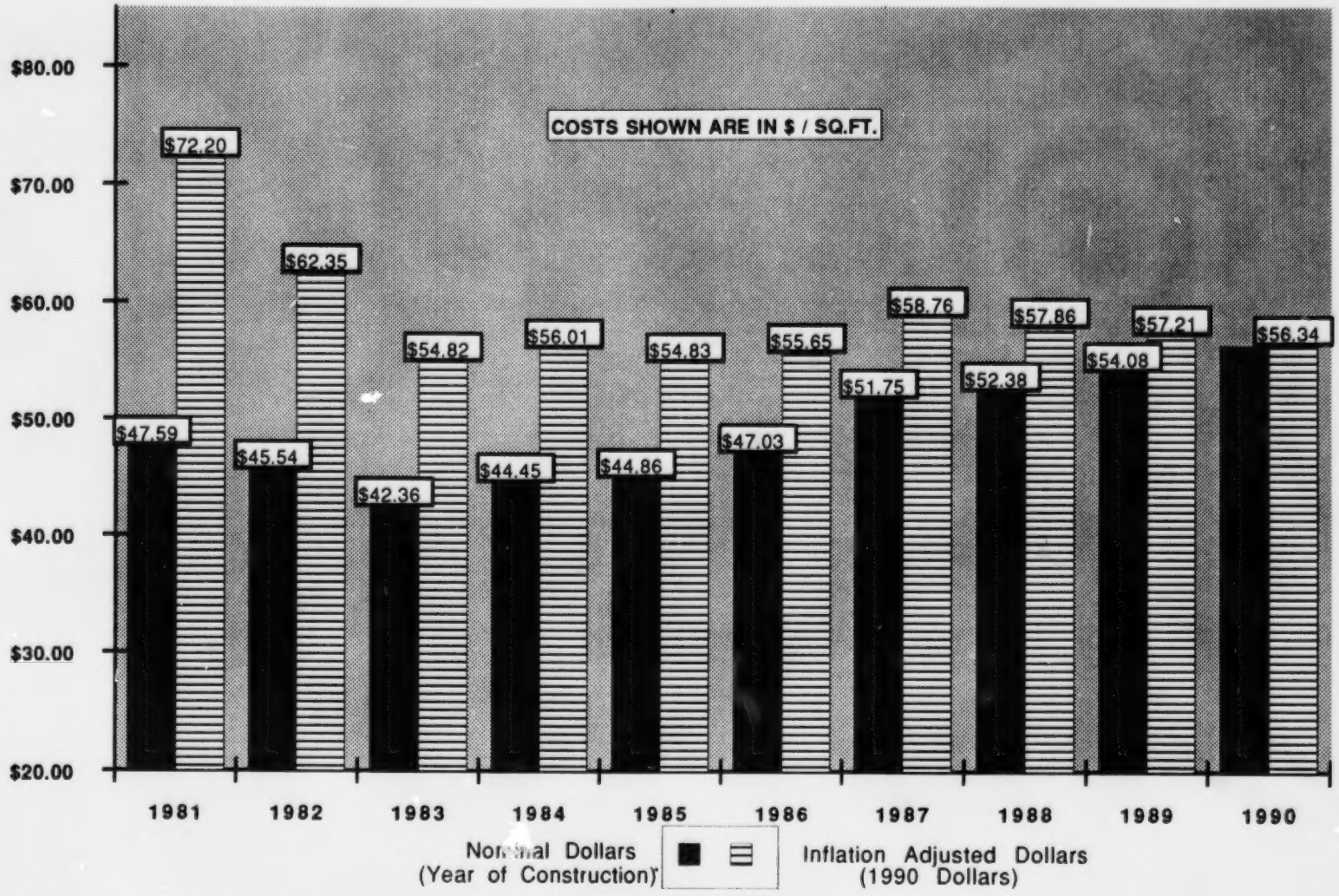
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ.FT. COSTS 1981 - 1990 : EDMONTON



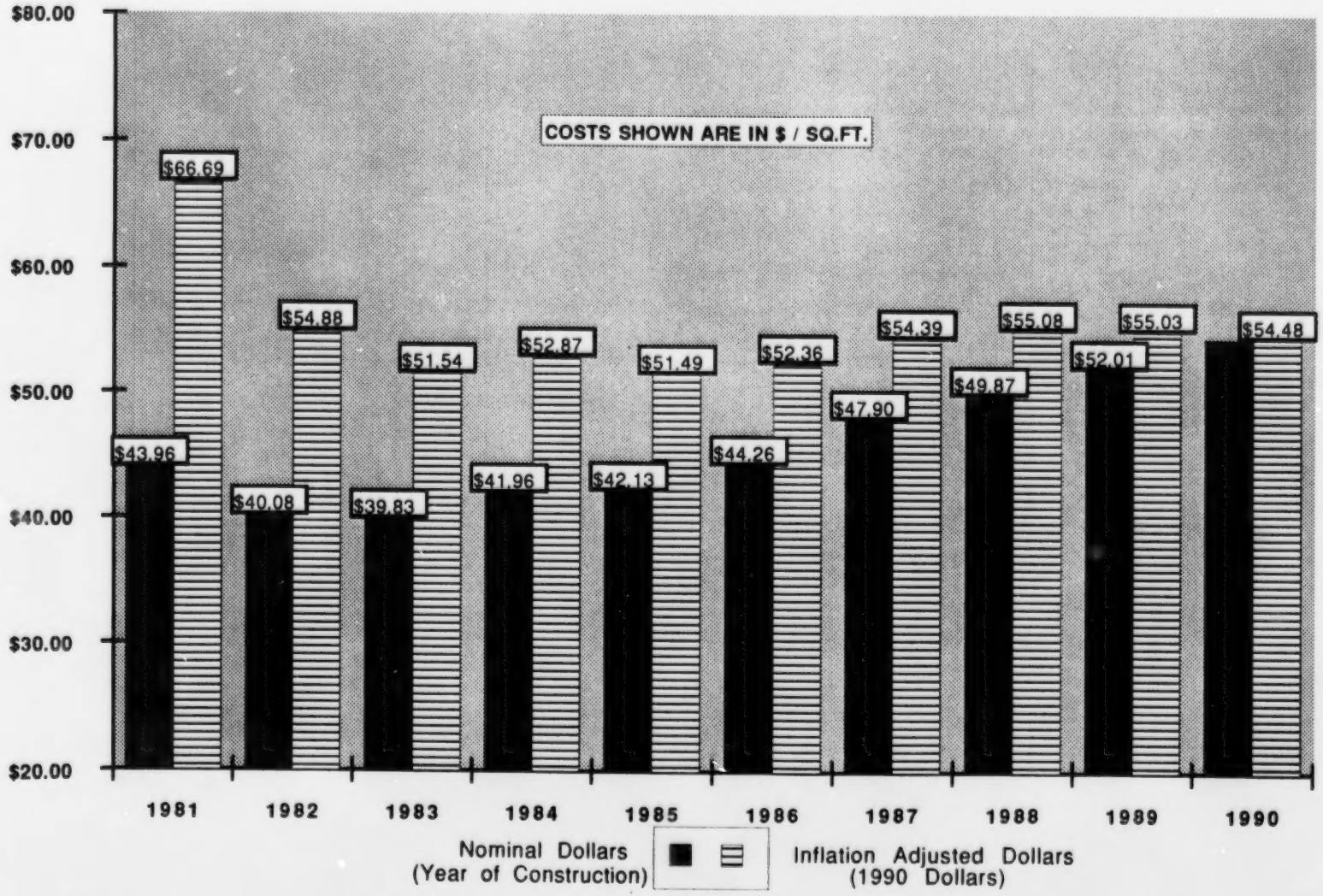
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : FORT McMURRAY



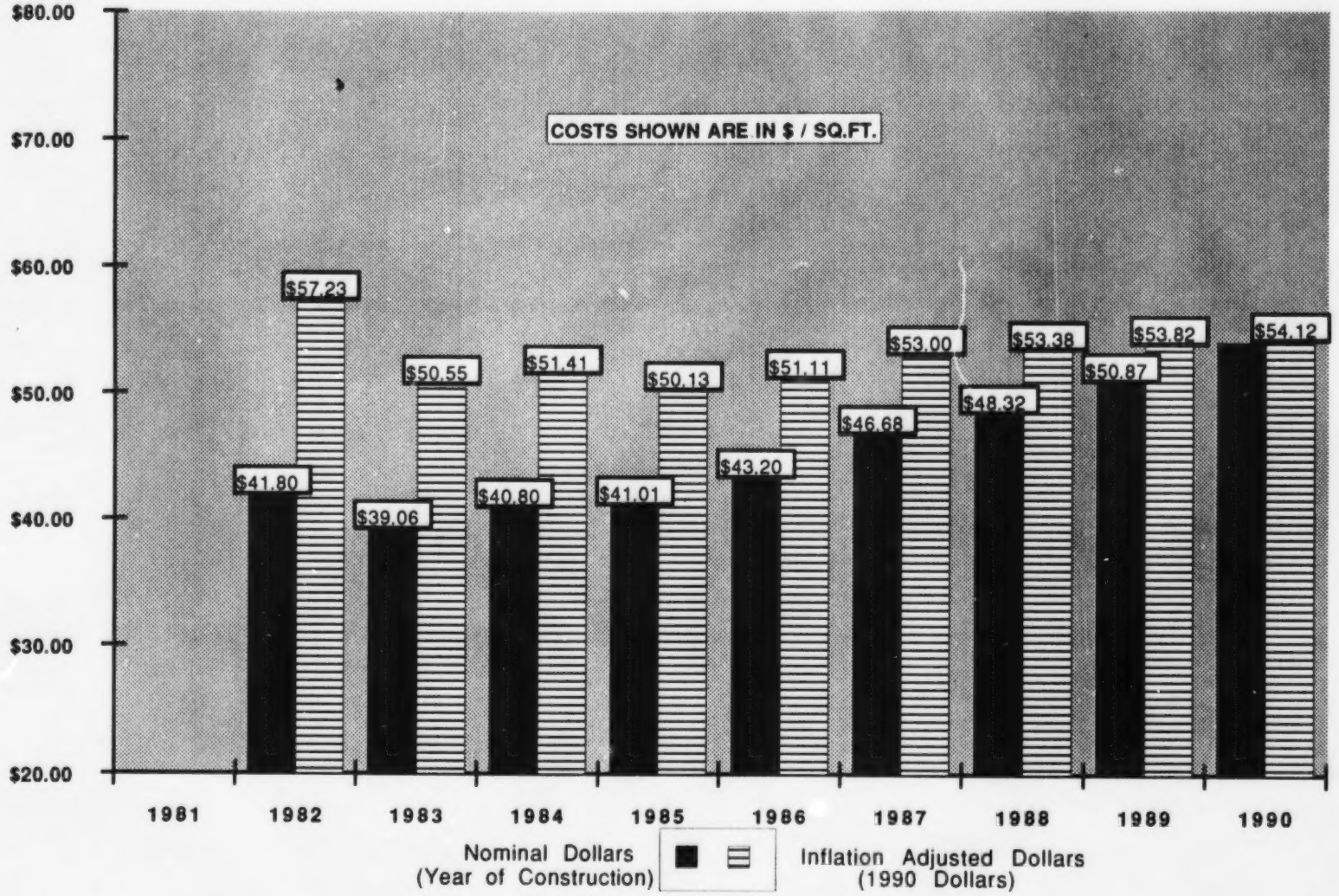
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : GRANDE PRAIRIE



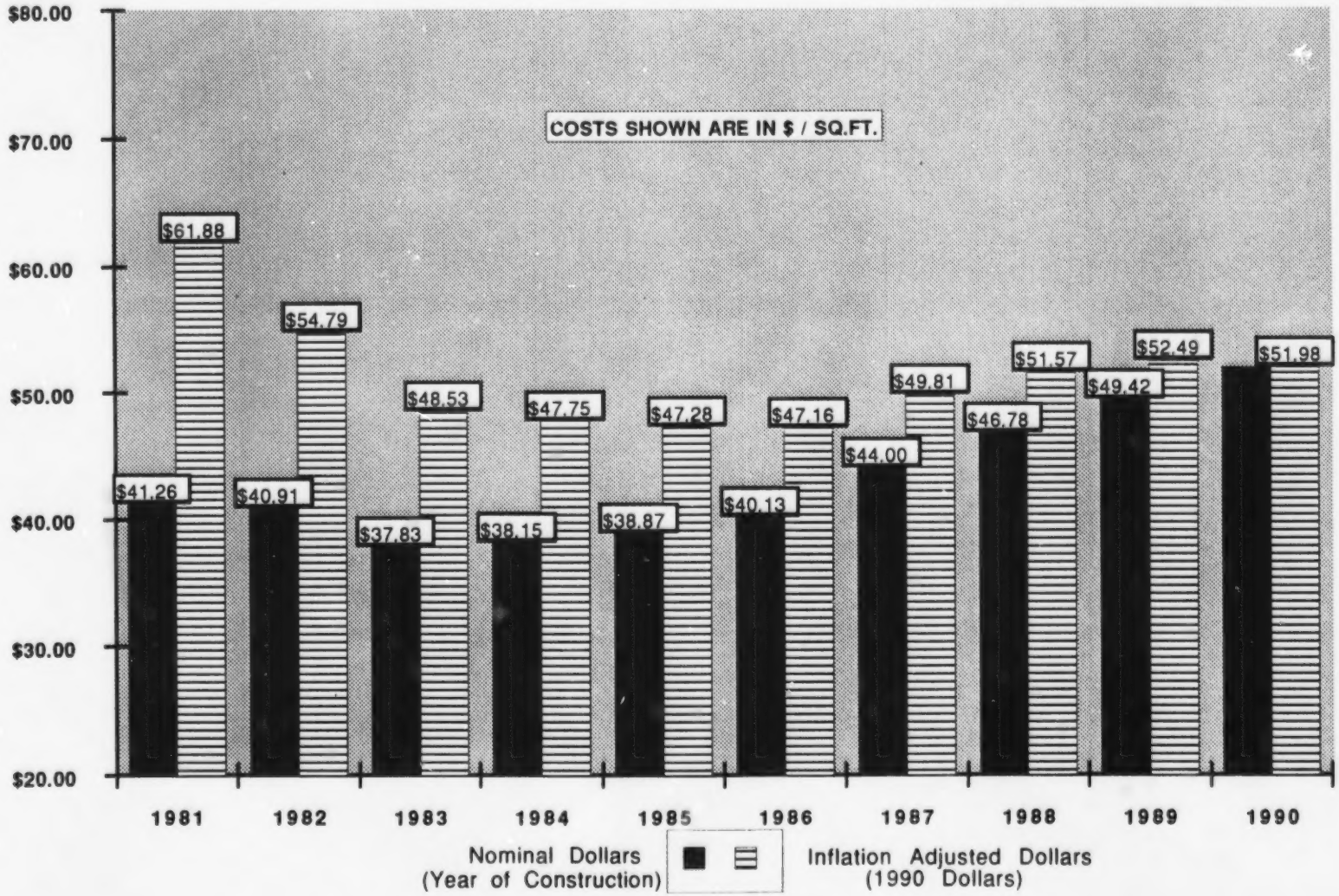
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : HINTON



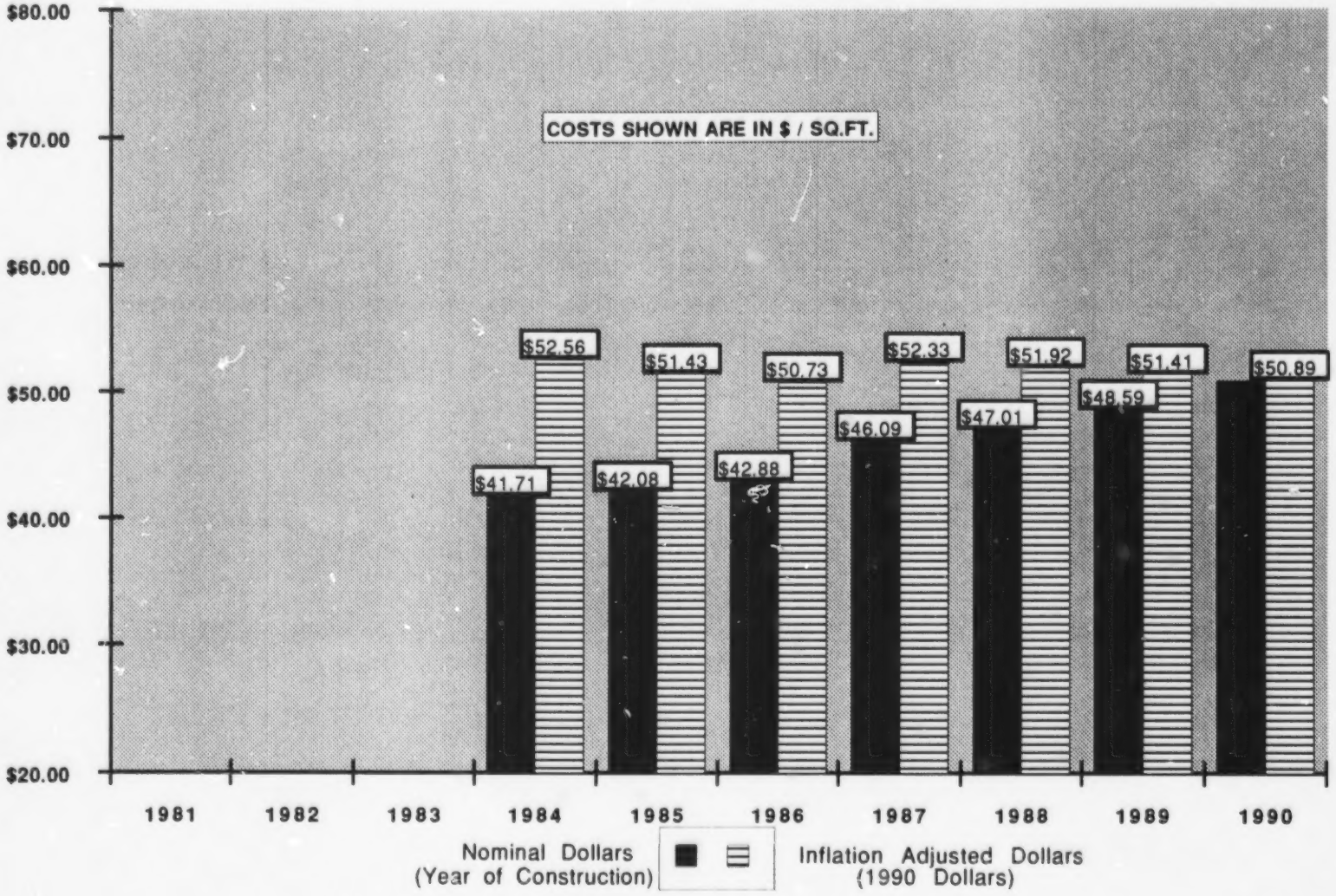
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : LETHBRIDGE



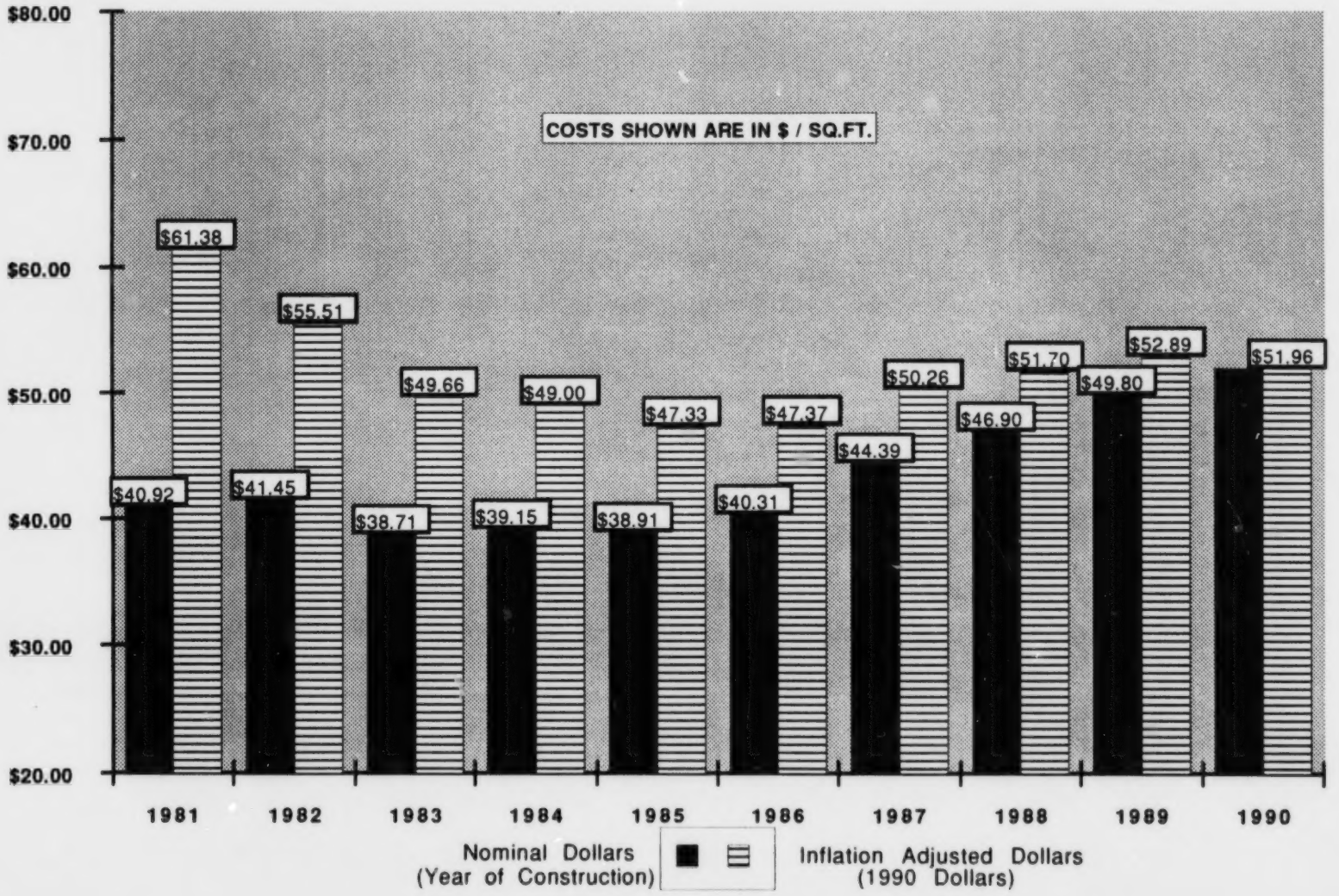
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : LLOYDMINSTER



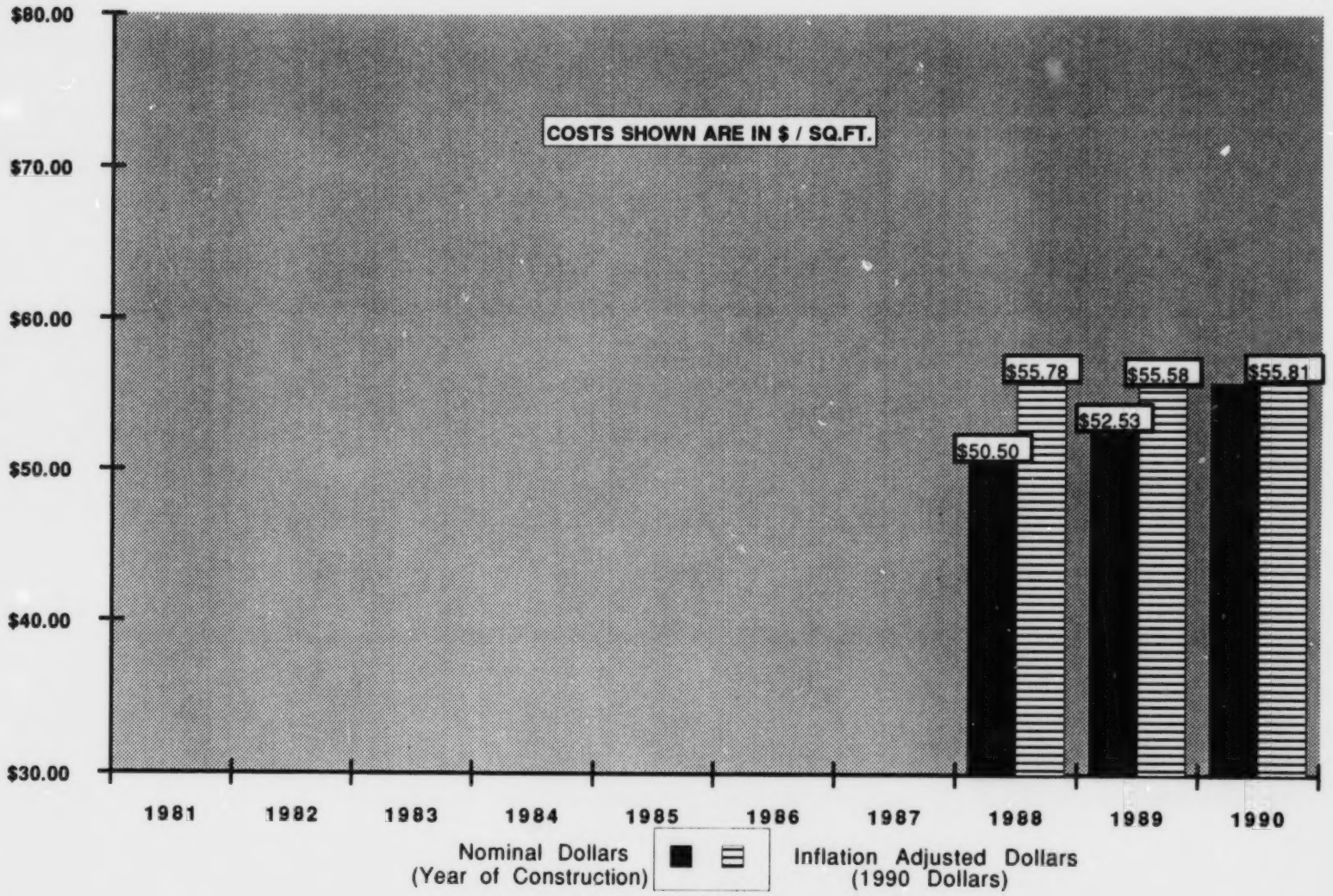
2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : MEDICINE HAT



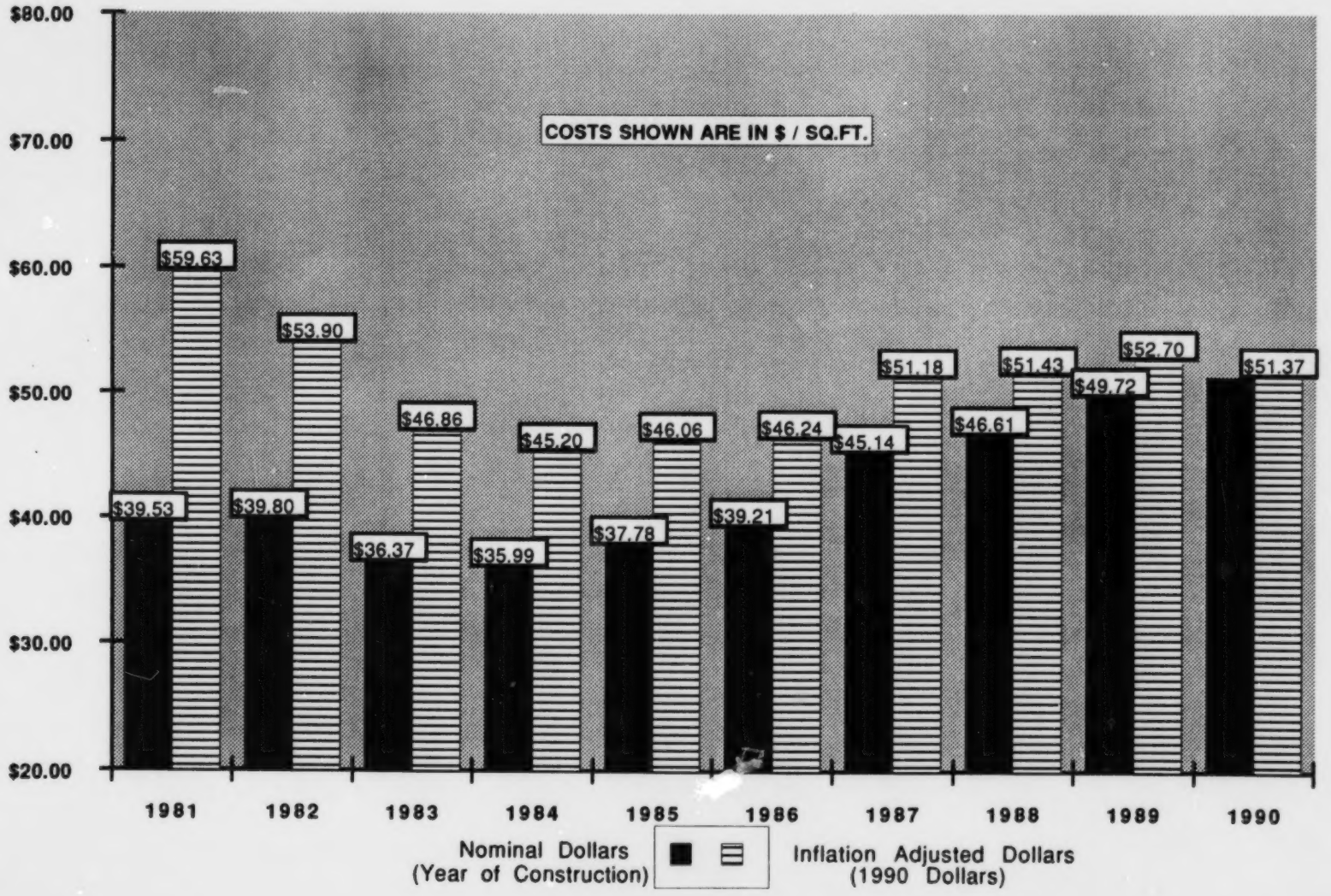
2.O SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1981 - 1990 : PEACE RIVER



2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

CHART SD. 9 : COMPARATIVE SQ. FT. COSTS 1989 - 1990 : RED DEER



2.0 SUMMARY OF FINDINGS FOR THE SINGLE DETACHED HOUSE

TABLE SD. 10 : TRADE DIVISION COST SUMMARIES

TRADE	CALGARY	EDMONTON	FORT McMURRAY	GRANDE PRAIRIE	HINTON	LETHBRIDGE	LLOYD-MINSTER	MEDICINE HAT	PEACE RIVER	RED DEER
1 Excavation	$3,384	$2,724	$3,101	$3,190	$2,818	$3,207	$2,708	$3,234	$2,841	$2,895
2 Concrete	$10,460	$10,232	$12,490	$12,002	$12,206	$10,535	$10,711	$11,349	$11,320	$10,283
3 Dampproofing	$462	$457	$536	$496	$524	$508	$446	$464	$543	$478
4 Siding	$5,944	$5,757	$6,621	$6,339	$6,591	$5,840	$5,934	$5,928	$6,600	$6,052
5 Roofing	$2,198	$2,020	$2,088	$2,144	$1,920	$1,962	$1,928	$2,054	$2,156	$2,032
6 Rough Carpentry	$14,933	$14,481	$16,536	$15,277	$15,258	$15,004	$13,859	$14,097	$16,098	$14,538
7 Finish Carpentry	$2,525	$2,369	$2,419	$2,310	$2,373	$2,327	$2,209	$2,293	$2,354	$2,265
8 Windows/Glazing	$2,839	$2,822	$2,944	$2,954	$2,822	$2,830	$2,885	$2,869	$3,136	$2,872
9 Sealants	$106	$103	$103	$104	$110	$106	$104	$103	$111	$100
10 Doors	$3,391	$3,398	$3,810	$3,845	$3,635	$3,475	$3,516	$3,515	$4,009	$3,489
11 Hardware	$495	$487	$487	$495	$500	$480	$482	$485	$500	$487
12 Ceramic Tiling	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13 Wallboard	$6,978	$6,504	$7,417	$6,868	$7,230	$6,773	$6,992	$6,840	$7,326	$6,720
14 Flooring	$3,868	$3,808	$3,872	$4,156	$3,852	$3,758	$3,848	$3,850	$4,308	$3,840
15 Painting	$2,890	$2,764	$2,977	$2,943	$2,953	$3,045	$2,865	$2,882	$3,095	$2,858
16 Fittings	$4,700	$4,441	$5,150	$4,667	$4,481	$4,992	$4,563	$4,611	$5,096	$4,728
17 Specialties	$621	$625	$650	$649	$653	$621	$620	$617	$678	$629
18 Appliances	$115	$116	$126	$125	$132	$112	$129	$115	$127	$120
19 Plumbing	$6,280	$6,140	$6,645	$6,480	$6,585	$6,020	$5,868	$6,035	$6,770	$6,380
20 Heating	$3,150	$3,140	$3,405	$3,420	$3,260	$3,060	$3,060	$3,050	$3,498	$3,105
21 Electrical	$4,086	$4,055	$4,445	$4,330	$4,310	$4,085	$4,240	$4,306	$4,400	$3,880
22 Site Overhead	$5,750	$5,750	$5,750	$5,750	$5,750	$5,750	$5,750	$5,750	$5,750	$5,750
TOTAL	$85,175	$82,193	$91,572	$88,544	$87,963	$84,490	$82,717	$84,447	$90,716	$83,501

3.0 COMMENTARY

3.0 COMMENTARY

3.1 General

Economic Factors

During the period of this study (October 1989 to October 1990) there have been major fluctuations in the levels of construction-related activity. The latter half of 1989 and the first three months of 1990 witnessed a significant increase in construction projects and planning, particularly in the major centres of Calgary and Edmonton, but also reflected to a lesser extent in Lethbridge, Grande Prairie and Hinton. This high level of activity resulted in shortages of labour in the major centres with a corresponding rise in labour costs.

The federal and provincial budgets brought down in early spring 1990 cut government spending on construction projects, in particular Alberta Public Works institutional and hospital projects. As an example, 90% of hospital construction in advanced stages of planning were frozen or scrapped. In addition the high interest rate policies of the Bank of Canada have deterred private investors from continuing to develop new projects. Public confidence in the economy has declined. The net result has been a nation-wide drop in real estate values since early 1990 which has further dampened the resurging interest of residential developers which was apparent in 1989.

Had this study been carried out six months earlier, in March 1990, the findings would likely have been significantly different in that they would have indicated larger increases in construction costs than contained in this report. This would be especially so in Calgary and Edmonton but also, to a lesser extent, in the smaller urban centres. As it is, the increases in October 1990 over October 1989 are relatively modest, being generally within one or two percentage points either way of general inflation as measured by the Consumer Price Index (6.2% for Calgary and 5.8% for Edmonton).

Cost increases are more attributable to labour cost increases than increases in material costs. In fact, some material prices, notably plywood, oriented strand board (OSB) and rough lumber, have dropped since a year ago. (It should be noted, however, that lumber prices vary from month to month and are influenced by overseas demand. The world-wide recession, affecting trading partners such as Japan, has contributed to keeping lumber price increases, as well as others, at a modest level).

3.0 COMMENTARY

3.1 General - (continued)

Labour

It is generally recognized that residential construction is performed by non-union labour. Rates paid by building contractors are driven by market forces. To a lesser extent they are influenced by union-negotiated rates for labour employed by governments, municipalities and certain industries.

The Merit Contractors' Association tracks the trends of rates paid to non-unionized labour in the major centres of Calgary and Edmonton. The most recent information provided by the Association is tabulated below. The hourly rates shown include payroll costs and all benefits.

	Calgary			Edmonton		
	1989	1990	% increase	1989	1990	% increase
Labourer	$12.82	$13.68	6.7%	$11.82	$12.83	8.5%
Carpenter	$17.58	$18.83	7.1%	$17.51	$18.60	6.2%
Electrician	$19.24	$20.69	7.5%	$18.64	$20.07	7.7%
Plumber	$18.42	$19.45	5.6%	$18.61	$20.11	8.1%

On average, according to Merit, Calgary labour rates have risen 6.75% and Edmonton's by 7.55%. The labour component of costs as reflected in Tables SD. 3 and WA. 3 generally reflects these increases. Actual labor cost increases will vary from centre to centre as the labour component of any particular trade is determined by market forces, reflected in trade contractor mark-ups, and not simply by actual wages and benefits paid to workers.

In the smaller centres, particularly Peace River, Hinton and Fort McMurray, the greater part of construction labour is provided by owner-operated companies with small, sometimes one-man, labour forces. Labour costs are affected by the activities of the primary industries in the areas around the cities such as pulp mills, lumber mills, mines and oil sand plants. Costs are invariably determined by current market conditions. With the exception of Lloydminster and Fort McMurray, prices in all the smaller centres are tempered by the fact that Calgary, Red Deer and Edmonton contractors sometimes compete successfully in these centres.

3.0 COMMENTARY

3.1 General - (continued)

Materials

Material prices have increased modestly over the study period. In overall terms the increases have been less than general inflation. Certain items have, however, increased in price by up to 8%, including vinyl siding, concrete in some centres, floor coverings, and some finishing materials. Oil-related materials such as dampproofing and asphalt shingles were only beginning to reflect the impact of oil price increases resulting from the crisis in the Gulf. Rough lumber prices, on the other hand, as noted previously, were up to 10% lower in cost. Reinforcing steel had no significant increase. The higher fuel costs had also not yet impacted on contractors' overheads which ultimately are charged back into trade costs.

It should be noted that, while supplier prices may be higher or lower than the year previous, cost savings or increases to a particular trade contractor may not necessarily be passed on in full. Again, market forces determine the price.

3.2 Highlights by Centre

Calgary

Total cost of construction	$85,175
Cost per square foot	$52.40
Increase over 1989	5.1%
Increase in labour cost	7.9%
Increase in material/equipment cost	3.8%

Calgary's single detached housing market has maintained the same high level of activity as a whole in 1990 as was begun in 1989. In both 1989 and 1990 total starts have been over 60% higher than in the prior years of 1987 and 1988. Calgary's population continues to rise at a fairly high rate (2.1% per annum, on average, since 1986) and this has fueled a demand for new housing. Much of the new construction, however, is aimed at the high end of the market.

At the beginning of the year activity was feverish and labour costs were escalating. The general economic downturn has resulted in a considerable tempering of activity. This has resulted in a significant reduction in labour costs, and, to a lesser extent, lower material costs due to lower mark-ups applied by the trade contractors. "Excavation" costs in Calgary are 13% higher than the average due mainly to higher costs of gravel.

3.2 Highlights by Centre - (continued)

Edmonton

Total cost of construction	$82,193
Cost per square foot	$50.57
Increase over 1989	7.3%
Increase in labour cost	9.6%
Increase in material/equipment cost	6.4%

The trend in Edmonton in terms of construction activity has essentially mirrored the trend in Calgary. The overall level of construction has, however generally been higher. There was more institutional and commercial building in Edmonton during 1990. Housing starts, in fact, increased from 1989 levels despite the slowdown which has also affected Edmonton's construction industry in the latter part of 1990. The result has been that Edmonton has experienced the greatest increase in costs of all centres studied, particularly labour cost.

Fort McMurray

Total cost of construction	$91,572
Cost per square foot	$56.34
Increase over 1989	4.2%
Increase in labour cost	6.9%
Increase in material/equipment cost	3.1%

Fort McMurray remains the most expensive centre in the province to build houses despite the fact that costs have not kept pace with inflation. The current increase in oil exploration and oil sands development caused by the crisis in the Gulf has not yet carried over into residential construction. The population of Fort McMurray has declined by 3.6% since 1986. This fact may be partly explained by redefinition of city boundaries but it is also reflected by the low number of new housing starts over the past three years. Low demand has the effect of depressing prices in real terms, as can be seen graphically in Chart SD.9 for Fort McMurray. Costs of concrete work and rough carpentry are 12% and 10% higher respectively for reasons which can be attributed to the remoteness of the centre and a lack of competition in these particular trades.

3.2 Highlights by Centre - (continued)

Grande Prairie

Total cost of construction	$88,544
Cost per square foot	$54.48
Increase over 1989	4.7%
Increase in labour cost	6.7%
Increase in material/equipment cost	4.0%

Grande Prairie has experienced an average population increase of approximately 1% over each of the past four years. Housing starts have been consistent over this period with an average of 146 new home starts each year although 1990 has experienced a modest decline over 1989. This level is substantially higher than that of the first half of the 1980's when the economic recession had taken hold after 1981. The rise in costs is consistent with the steady activity.

Hinton

Total cost of construction	$87,963
Cost per square foot	$54.12
Increase over 1989	6.4%
Increase in labour cost	8.5%
Increase in material/equipment cost	5.5%

Hinton's population has increased by almost 15% since 1986, probably as a result of expansion of local industries. This has generated a spurt in new house construction over the past two years (from 3 starts in 1986 and 7 in 1988 to 10 in 1989 and 17 in the first nine months of 1990). There has been a corresponding increase in construction costs, mirroring the rise in Edmonton, the closest major centre.

3.2 Highlights by Centre - (continued)

Lethbridge

Total cost of construction	$84,490
Cost per square foot	$51.98
Increase over 1989	5.2%
Increase in labour cost	7.6%
Increase in material/equipment cost	4.2%

Lethbridge's economy has been fairly stable over the past four years with a reasonably steady level of housing activity. Housing starts this year were the highest, at 232 to the end of October, of recent years. Labour costs have kept pace with, or have exceeded inflation, reflecting a healthy economy buoyed by good harvests this year and last.

Lloydminster

Total cost of construction	$82,717
Cost per square foot	$50.89
Increase over 1989	4.7%
Increase in labour cost	8.3%
Increase in material/equipment cost	3.5%

The Lloydminster economy has been sluggish and construction costs have not kept pace with general inflation. This is likely to change if the higher oil prices result in increased spending by oil companies and governments. Housing starts have averaged three per month this year, an increase of 50% over 1989. This number is fairly low for the size of the city but may be a reflection of the fact that the population has not increased since 1986.

3.2 Highlights by Centre - (continued)

Medicine Hat

Total cost of construction	$84,447
Cost per square foot	$51.96
Increase over 1989	4.3%
Increase in labour cost	6.0%
Increase in material/equipment cost	3.7%

The city of Medicine Hat, in the south-east corner of the province, is generally not affected by the economies of the major centres. In many respects the comments applicable to Lethbridge also apply to Medicine Hat with the exception that it is 150 kilometres further removed from Calgary. Residential construction activity has remained steady over the last four years, the population has experienced modest growth and costs have also risen modestly.

Peace River

Total cost of construction	$90,716
Cost per square foot	$55.81
Increase over 1989	6.3%
Increase in labour cost	8.1%
Increase in material/equipment cost	5.5%

Peace River, the smallest of the urban centres with a 1990 population of only 6,644, is also quite remote from other major centres. There was a jump in housing starts in late 1988 and all of 1989 as a result of the pulp mill expansion and this, along with its remote location, has kept costs at a high level, second only to Fort McMurray. Local contractors are few in number and tend to be small, owner-operated concerns. It is significant to note that two recent multi-unit complexes were built by outside contractors, one from Red Deer and the other from Edmonton. The Edmonton contractor bid successfully on a CMHC/AMHC project of 11 duplexes. His price was lower by 5% than the local competitors. Most building materials are trucked from Edmonton at a cost of $1.50 per mile per trailer load. It is also economical for an outside contractor to relocate labour temporarily to Peace River, and to absorb transportation and accommodation charges.

3.2 Highlights by Centre - (continued)

Red Deer

Total cost of construction	$83,501
Cost per square foot	$51.37
Increase over 1989	3.3%
Increase in labour cost	2.6%
Increase in material/equipment cost	3.6%

Increases in Red Deer were the lowest of the centres studied. The reason is not immediately apparent since housing starts have been fairly consistent over the past four years, but it may be attributable to an oversupply of labour and a slow local economy. It is significant to note that Red Deer trades are competitive in the Calgary area and even as far away as Peace River.

4.0 DETAILED COST ESTIMATES BY TRADE DIVISION FOR EACH CENTRE

DETAILED COST ESTIMATES FOR CALGARY

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.84	250	2.07	615	2.91	865
.11	Excavate trench for garage grade beam.	4	m3	7.50	30	13.75	55	21.25	85
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.69	125	4.05	300	5.74	425
.30	150mm gravel or sand bed under slab on grade.	25	m3	4.40	110	24.00	600	28.40	710
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.06	173	0.30	50	1.36	223
.50	Remove surplus excavated material from site.	223	m3	0.00	0	4.83	1,076	4.83	1,076
	SUB-TOTAL: EXCAVATION	**$22.41**	**/ m2**		**688**		**2,696**		**3,384**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	89.26	1,696	89.26	1,696
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	90.00	90	90.00	90
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	20.79	437	32.97	692	53.75	1,129

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.83	216	0.83	216
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.83	30	0.83	30
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.49	110	1.49	110
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	31.16	1,247	14.63	585	45.79	1,832
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.86	282	5.72	149	16.59	431
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.51	406	6.76	608	11.26	1,014
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.70	422	9.20	681	14.90	1,103
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	65.00	65	280.00	280	345.00	345
.60	Parging to concrete walls.	10	m2	11.20	112	3.85	39	15.05	151

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	665.00	665	1,650.00	1,650	2,315.00	2,315
	SUB-TOTAL: CONCRETE	**$69.27**	**/ m2**		**3,635**		**6,826**		**10,460**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.63	80	1.01	128	1.64	208
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.31	194	1.33	60	5.64	254
	SUB-TOTAL: DAMPPROOFING	**$3.06**	**/ m2**		**274**		**188**		**462**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	5.69	848	14.68	2,188	20.38	3,036
.20	Prefinished perforated aluminum soffit.	44	m2	5.27	232	11.09	488	16.36	720
.30	Prefinished aluminum fascia.	70	m	1.10	77	2.79	195	3.89	273
.40	Brick facing to front elevation.	20	m2	55.00	1,100	40.75	815	95.75	1,915
	SUB-TOTAL: SIDING	**$39.36**	**/ m2**		**2,257**		**3,686**		**5,944**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	3.46	622	5.19	934	8.64	1,556
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	2.30	230	4.12	412	6.42	642
	SUB-TOTAL: ROOFING	**$14.56**	**/ m2**		**852**		**1,346**		**2,198**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	467.38	3,926	467.38	3,926
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	635.83	1,526	635.83	1,526
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.21	2,890	8.21	2,890
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.36	906	5.36	906
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	29.11	4,396	0.00	0	29.11	4,396

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.50	28	0.89	50	1.39	78
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.00	38	28.00	56
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	530.00	530	450.00	625	1,155.00	1,155
	SUB-TOTAL: CARPENTRY (ROUGH)	**$98.89**	**/ m2**		**4,972**		**9,961**		**14,933**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	90.00	90	75.00	75	165.00	165
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	98.00	98	93.00	93	191.00	191
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	105.00	105	110.00	110	215.00	215
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	6.25	25	9.50	38	15.75	63

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	120.00	240	150.00	300	270.00	540
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.87	676	1.48	535	3.36	1,211
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	30.00	60	40.00	80	70.00	140
	SUB-TOTAL: CARPENTRY (FINISH)	**$16.72**	**/ m2**		**1,294**		**1,231**		**2,525**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	584.00	584	584.00	584
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	272.50	1,635	272.50	1,635
	- 900 x 1550 mm	2	No.	0.00	0	310.00	620	310.00	620
	SUB-TOTAL: WINDOWS AND GLAZING	**$18.80**	**/ m2**		**0**		**2,839**		**2,839**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **CALGARY**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.48	52	0.30	33	0.78	85
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	1.00	15	0.40	6	1.40	21
	SUB-TOTAL: SEALANTS	**$0.70**	**/ m2**		**67**		**39**		**106**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	30.00	30	276.00	276	306.00	306
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	30.00	30	246.00	246	276.00	276
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	75.00	75	795.00	795	870.00	870
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	116.00	116	665.00	665	781.00	781

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	16.00	16	41.00	41	57.00	57
	- 711 x 2080 mm	3	No.	16.00	48	41.33	124	57.33	172
	- 762 x 2080 mm	6	No.	16.00	96	41.33	248	57.33	344
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	39.00	39	55.00	55
	- 1220 x 2080 mm	3	No.	12.00	36	70.00	210	82.00	246
	- 1320 x 2080 mm	1	No.	16.00	16	75.00	75	91.00	91
	-1524 x 2080 mm	1	No.	16.00	16	77.00	77	93.00	93
	- 1830 x 2080 mm	1	No.	16.00	16	94.00	84	100.00	100
	SUB-TOTAL: DOORS	**$22.46**	**/ m2**		**511**		**2,880**		**3,391**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	19.00	38	46.50	93	65.50	131
.20	Security deadbolt.	1	No.	19.00	19	32.00	32	51.00	51
.30	Latch sets.	7	sets	10.71	75	14.43	101	25.14	176
.40	Bathroom privacy latch sets.	3	sets	11.67	35	17.00	51	28.67	86
.60	Door stops.	11	No.	2.73	30	1.91	21	4.64	51
	SUB-TOTAL: HARDWARE	**$3.28**	**/ m2**		**197**		**298**		**495**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.32	2,104	3.57	2,260	6.89	4,364
.40	Finish to ceiling - textured.	138	m2	1.44	199	1.27	175	2.71	374
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.11	188	5.18	880	6.28	1,068
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.52	135	6.62	589	8.13	724
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.37	96	0.37	95	0.74	191
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.31	21	0.66	45
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.82	56	2.29	156	3.12	212
	SUB-TOTAL: WALLBOARD	**$46.21**	**/ m2**		**2,802**		**4,176**		**6,978**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.67	140	13.14	276	19.81	416
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.83	512	27.74	2,940	32.57	3,452
	SUB-TOTAL: FLOORING	**$25.62**	**/ m2**		**652**		**3,216**		**3,868**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	9.38	75	3.00	24	12.38	99
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	72.00	72	24.00	24	96.00	96
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	8.57	180	3.00	63	11.57	243
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.41	1,088	0.73	330	3.14	1,418
.30	Two coats semigloss on internal doors and frames.	10	No.	24.00	240	6.80	68	30.80	308
.35	Two coats semigloss on bi-fold doors.	7	No.	30.71	215	8.57	60	39.29	275

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.04	200	0.26	50	1.30	250
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.57	50	1.29	18	4.86	68
.44	Stain finish to deck handrail and balustrade.	16	m	5.00	80	1.13	18	6.13	98
	SUB-TOTAL: PAINTING	**$19.14**	**/ m2**		**2,225**		**665**		**2,890**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	5.60	112	13.65	273	19.25	385
.20	Vanities and base cabinets.	7	m	42.57	298	425.00	2,975	467.57	3,273
.21	Kitchen wall cabinets.	4	m	41.50	166	219.00	876	260.50	1,042
	SUB-TOTAL: FITTINGS	**$31.13**	**/ m2**		**576**		**4,124**		**4,700**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.22	56	9.22	83	15.44	139
.20	Medicine cabinets.	2	No.	12.84	26	63.00	126	75.84	152
.25	Mirrors.	2	No.	13.00	26	84.00	168	97.00	194
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	6.00	12	12.00	24
.40	Mail box and house numbers.	1	set	6.00	6	34.00	34	40.00	40
.50	18 mm dia. chrome coat rods.	6	No.	6.00	36	6.00	36	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.11**	**/ m2**		**162**		**459**		**621**
18	**APPLIANCES**								
.10	Range hood	1	No.	25.00	25	90.00	90	115.00	115
	SUB-TOTAL: APPLIANCES	**$0.76**	**/ m2**		**25**		**90**		**115**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,560.00	2,560	3,720.00	3,720	6,280.00	6,280
	SUB-TOTAL: PLUMBING	**$41.59**	**/ m2**		**2,560**		**3,720**		**6,280**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	990.00	990	2,160.00	2,160	3,150.00	3,150
	SUB-TOTAL: HEATING	**$20.86**	**/ m2**		**990**		**2,160**		**3,150**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **CALGARY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,160.00	1,160	1,926.00	1,926	3,086.00	3,086
	SUB-TOTAL: ELECTRICAL	**$27.06**	**/ m2**		**1,160**		**2,926**		**4,086**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - CALGARY	**$564.07**	**/ m2**		**25,899**		**59,276**		**85,175**

DETAILED COST ESTIMATES FOR EDMONTON

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.76	226	1.43	425	2.19	651
.11	Excavate trench for garage grade beam.	4	m3	5.00	20	14.50	58	19.50	78
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.22	90	3.78	280	5.00	370
.30	150mm gravel or sand bed under slab on grade.	25	m3	4.00	100	18.00	450	22.00	550
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.01	165	0.30	50	1.31	215
.50	Remove surplus excavated material from site.	223	m3	0.00	0	3.86	860	3.86	860
	SUB-TOTAL: EXCAVATION	**$18.04**	**/ m2**		**601**		**2,123**		**2,724**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	97.37	1,850	97.37	1,850
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	99.00	99	99.00	99
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	16.19	340	33.81	710	50.00	1,050

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **EDMONTON**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.85	222	0.85	222
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.89	32	0.89	32
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.35	100	1.35	100
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	31.25	1,250	13.13	525	44.38	1,775
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	11.08	288	5.96	155	17.04	443
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.61	325	6.78	610	10.39	935
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.14	380	9.41	696	14.54	1,076
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	60.00	60	245.00	245	305.00	305
.60	Parging to concrete walls.	10	m2	11.00	110	4.00	40	15.00	150

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	635.00	635	1,560.00	1,560	2,195.00	2,195
	SUB-TOTAL: CONCRETE	**$67.76**	**/ m2**		**3,388**		**6,844**		**10,232**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.59	75	1.01	128	1.60	203
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.31	194	1.33	60	5.64	254
	SUB-TOTAL: DAMPPROOFING	**$3.03**	**/ m2**		**269**		**188**		**457**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	5.47	815	14.50	2,160	19.97	2,975
.20	Prefinished perforated aluminum soffit.	44	m2	4.50	198	10.82	476	15.32	674
.30	Prefinished aluminum fascia.	70	m	1.07	75	2.69	188	3.76	263
.40	Brick facing to front elevation.	20	m2	51.00	1,020	41.25	825	92.25	1,845
	SUB-TOTAL: SIDING	**$38.13**	**/ m2**		**2,108**		**3,649**		**5,757**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	3.06	550	4.93	888	7.99	1,438
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.76	176	4.06	406	5.82	582
	SUB-TOTAL: ROOFING	**$13.38**	**/ m2**		**726**		**1,294**		**2,020**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	454.76	3,820	454.76	3,820
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	633.33	1,520	633.33	1,520
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.64	2,690	7.64	2,690
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.03	850	5.03	850
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.87	4,360	0.00	0	28.87	4,360

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
	6 CARPENTRY (ROUGH) - contd.								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.54	30	0.93	52	1.46	82
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.00	38	28.00	56
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	488.00	488	450.00	615	1,103.00	1,103
	SUB-TOTAL: CARPENTRY (ROUGH)	**$95.90**	**/ m2**		**4,896**		**9,585**		**14,481**
	7 CARPENTRY (FINISH)								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	90.00	90	66.00	66	156.00	156
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	96.00	96	83.00	83	179.00	179
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	105.00	105	97.00	97	202.00	202
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	6.00	24	9.00	36	15.00	60

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	98.00	196	144.00	288	242.00	484
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.79	645	1.37	495	3.16	1,140
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	31.00	62	43.00	86	74.00	148
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.69**	**/ m2**		**1,218**		**1,151**		**2,369**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	584.00	584	584.00	584
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	270.00	1,620	270.00	1,620
	- 900 x 1550 mm	2	No.	0.00	0	309.00	618	309.00	618
	SUB-TOTAL: WINDOWS AND GLAZING	**$18.69**	**/ m2**		**0**		**2,822**		**2,822**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.46	50	0.30	33	0.76	83
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	0.93	14	0.40	6	1.33	20
	SUB-TOTAL: SEALANTS	**$0.68**	**/ m2**		**64**		**39**		**103**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	288.00	288	316.00	316
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	240.00	240	268.00	268
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	72.00	72	840.00	840	912.00	912
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	124.00	124	630.00	630	754.00	754

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	41.00	41	56.00	56
	- 711 x 2080 mm	3	No.	15.00	45	41.33	124	56.33	169
	- 762 x 2080 mm	6	No.	15.00	90	41.33	248	56.33	338
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	39.00	39	55.00	55
	- 1220 x 2080 mm	3	No.	12.00	36	70.00	210	82.00	246
	- 1320 x 2080 mm	1	No.	16.00	16	75.00	75	91.00	91
	-1524 x 2080 mm	1	No.	16.00	16	77.00	77	93.00	93
	- 1830 x 2080 mm	1	No.	16.00	16	84.00	84	100.00	100
	SUB-TOTAL: DOORS	**$22.50**	**/ m2**		**502**		**2,896**		**3,398**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	18.50	37	47.00	94	65.50	131
.20	Security deadbolt.	1	No.	19.00	19	33.00	33	52.00	52
.30	Latch sets.	7	sets	10.00	70	14.86	104	24.86	174
.40	Bathroom privacy latch sets.	3	sets	10.00	30	17.67	53	27.67	83
.60	Door stops.	11	No.	2.27	25	2.00	22	4.27	47
	SUB-TOTAL: HARDWARE	**$3.23**	**/ m2**		**181**		**306**		**487**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.98	1,885	3.32	2,100	6.30	3,985
.40	Finish to ceiling - textured.	138	m2	1.36	188	1.23	170	2.59	358
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.03	175	5.06	860	6.09	1,035
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.52	135	6.27	558	7.79	693
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.35	90	0.37	95	0.71	185
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.34	23	0.31	21	0.65	44
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.71	48	2.29	156	3.00	204
	SUB-TOTAL: WALLBOARD	**$43.07**	**/ m2**		**2,544**		**3,960**		**6,504**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **EDMONTON**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.57	138	13.43	282	20.00	420
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.70	498	27.26	2,890	31.96	3,388
	SUB-TOTAL: FLOORING	**$25.22**	**/ m2**		**636**		**3,172**		**3,808**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.75	70	3.00	24	11.75	94
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	70.00	70	24.00	24	94.00	94
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.86	165	3.00	63	10.86	228
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.19	988	0.72	325	2.91	1,313
.30	Two coats semigloss on internal doors and frames.	10	No.	24.20	242	6.80	68	31.00	310
.35	Two coats semigloss on bi-fold doors.	7	No.	31.14	218	8.86	62	40.00	280

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.96	186	0.29	56	1.25	242
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.43	48	1.29	18	4.71	66
.44	Stain finish to deck handrail and balustrade.	16	m	5.25	84	1.13	18	6.38	102
	SUB-TOTAL: PAINTING	**$18.30**	**/ m2**		**2,096**		**668**		**2,764**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	5.30	106	12.80	256	18.10	362
.20	Vanities and base cabinets.	7	m	41.14	288	396.43	2,775	437.57	3,063
.21	Kitchen wall cabinets.	4	m	40.00	160	214.00	856	254.00	1,016
	SUB-TOTAL: FITTINGS	**$29.41**	**/ m2**		**554**		**3,887**		**4,441**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.22	56	9.44	85	15.67	141
.20	Medicine cabinets.	2	No.	13.00	26	64.00	128	77.00	154
.25	Mirrors.	2	No.	13.00	26	84.00	168	97.00	194
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	6.00	12	12.00	24
.40	Mail box and house numbers.	1	set	6.00	6	34.00	34	40.00	40
.50	18 mm dia chrome coat rods.	6	No.	6.00	36	6.00	36	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.14**	**/ m2**		**162**		**463**		**625**
18	**APPLIANCES**								
.10	Range hood	1	No.	24.00	24	92.00	92	116.00	116
	SUB-TOTAL: APPLIANCES	**$0.77**	**/ m2**		**24**		**92**		**116**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,390.00	2,390	3,750.00	3,750	6,140.00	6,140
	SUB-TOTAL: PLUMBING	**$40.66**	**/ m2**		**2,390**		**3,750**		**6,140**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	860.00	960	2,180.00	2,180	3,140.00	3,140
	SUB-TOTAL: HEATING	**$20.79**	**/ m2**		**960**		**2,180**		**3,140**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **EDMONTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,075.00	1,075	1,980.00	1,980	3,055.00	3,055
	SUB-TOTAL: ELECTRICAL	**$26.85**	**/ m2**		**1,075**		**2,980**		**4,055**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - EDMONTON	**$544.32**	**/ m2**		**24,394**		**57,799**		**82,193**

DETAILED COST ESTIMATES FOR GRANDE PRAIRIE

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.73	218	1.12	334	1.86	552
.11	Excavate trench for garage grade beam.	4	m3	5.00	20	8.00	32	13.00	52
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.19	88	1.62	120	2.81	208
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.84	96	25.60	640	29.44	736
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.13	186	0.34	56	1.48	242
.50	Remove surplus excavated material from site.	223	m3	0.00	0	6.28	1,400	6.28	1,400
	SUB-TOTAL: EXCAVATION	**$21.13**	**/ m2**		**608**		**2,582**		**3,190**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	132.00	2,508	132.00	2,508
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	132.00	132	132.00	132
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	17.43	366	40.19	844	57.62	1,210

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.91	238	0.91	238
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.94	34	0.94	34
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.46	108	1.46	108
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	27.40	1,096	13.65	546	41.05	1,642
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.62	276	5.85	152	16.46	428
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.89	350	9.98	898	13.87	1,248
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.24	388	13.84	1,024	19.08	1,412
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	58.00	58	250.00	250	308.00	308
.60	Parging to concrete walls.	10	m2	10.80	108	4.60	46	15.40	154

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	700.00	700	1,880.00	1,880	2,580.00	2,580
	SUB-TOTAL: CONCRETE	**$79.48**	**/ m2**		**3,342**		**8,660**		**12,002**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.57	72	1.02	130	1.59	202
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.80	216	1.73	78	6.53	294
	SUB-TOTAL: DAMPPROOFING	**$3.28**	**/ m2**		**288**		**208**		**496**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	7.11	1,060	15.03	2,240	22.15	3,300
.20	Prefinished perforated aluminum soffit.	44	m2	6.27	276	11.32	498	17.59	774
.30	Prefinished aluminum fascia.	70	m	1.21	85	2.94	206	4.16	291
.40	Brick facing to front elevation.	20	m2	53.80	1,076	44.90	898	98.70	1,974
	SUB-TOTAL: SIDING	**$41.98**	**/ m2**		**2,497**		**3,842**		**6,339**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.91	524	5.14	926	8.06	1,450
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.98	198	4.96	496	6.94	694
	SUB-TOTAL: ROOFING	**$14.20**	**/ m2**		**722**		**1,422**		**2,144**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	465.48	3,910	465.48	3,910
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	645.83	1,550	645.83	1,550
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.20	2,885	8.20	2,885
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.18	876	5.18	876
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	31.52	4,760	0.00	0	31.52	4,760

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.50	28	0.93	52	1.43	80
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.00	38	28.00	56
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	540.00	540	450.00	620	1,160.00	1,160
	SUB-TOTAL: CARPENTRY (ROUGH)	**$101.17**	**/ m2**		**5,346**		**9,931**		**15,277**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	92.00	92	66.00	66	158.00	158
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	98.00	98	83.00	83	181.00	181
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	99.00	99	97.00	97	196.00	196
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	5.00	20	9.00	36	14.00	56

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	96.00	192	145.00	290	241.00	482
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.76	635	1.27	460	3.03	1,095
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	31.00	62	40.00	80	71.00	142
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.30**	**/ m2**		**1,198**		**1,112**		**2,310**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	636.00	636	636.00	636
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	273.33	1,640	273.33	1,640
	- 900 x 1550 mm	2	No.	0.00	0	339.00	678	339.00	678
	SUB-TOTAL: WINDOWS AND GLAZING	**$19.56**	**/ m2**		**0**		**2,954**		**2,954**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.44	48	0.31	34	0.75	82
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	1.00	15	0.47	7	1.47	22
	SUB-TOTAL: SEALANTS	**$0.69**	**/ m2**		**63**		**41**		**104**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	348.00	348	376.00	376
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	246.00	246	274.00	274
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	73.00	73	1,099.00	1,099	1,172.00	1,172
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	125.00	125	640.00	640	765.00	765

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	50.00	50	65.00	65
	- 711 x 2080 mm	3	No.	15.00	45	50.00	150	65.00	195
	- 762 x 2080 mm	6	No.	15.00	90	50.00	300	65.00	390
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	44.00	44	60.00	60
	- 1220 x 2080 mm	3	No.	12.00	36	72.67	218	84.67	254
	- 1320 x 2080 mm	1	No.	16.00	16	78.00	78	94.00	94
	-1524 x 2080 mm	1	No.	16.00	16	80.00	80	96.00	96
	- 1830 x 2080 mm	1	No.	16.00	16	88.00	88	104.00	104
	SUB-TOTAL: DOORS	**$25.46**	**/ m2**		**504**		**3,341**		**3,845**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	19.00	38	48.00	96	67.00	134
.20	Security deadbolt.	1	No.	19.00	19	35.00	35	54.00	54
.30	Latch sets.	7	sets	9.86	69	15.00	105	24.86	174
.40	Bathroom privacy latch sets.	3	sets	10.00	30	18.00	54	28.00	84
.60	Door stops.	11	No.	2.36	26	2.09	23	4.45	49
	SUB-TOTAL: HARDWARE	**$3.28**	**/ m2**		**182**		**313**		**495**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.10	1,960	3.46	2,188	6.55	4,148
.40	Finish to ceiling - textured.	138	m2	1.32	182	1.25	172	2.57	354
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.02	173	5.68	965	6.69	1,138
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.53	136	7.19	640	8.72	776
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.38	98	0.37	95	0.75	193
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.38	26	0.31	21	0.69	47
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.82	56	2.29	156	3.12	212
	SUB-TOTAL: WALLBOARD	**$45.48**	**/ m2**		**2,631**		**4,237**		**6,868**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	7.14	150	14.19	298	21.33	448
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.60	488	30.38	3,220	34.98	3,708
	SUB-TOTAL: FLOORING	**$27.52**	**/ m2**		**638**		**3,518**		**4,156**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.50	68	3.13	25	11.63	93
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	68.00	68	25.00	25	93.00	93
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.86	165	3.10	65	10.95	230
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.35	1,060	0.75	336	3.10	1,396
.30	Two coats semigloss on internal doors and frames.	10	No.	26.60	266	7.00	70	33.60	336
.35	Two coats semigloss on bi-fold doors.	7	No.	37.14	260	9.14	64	46.29	324

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.03	198	0.30	58	1.33	256
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.50	6	4.00	16
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	3.00	6	10.50	21
.43	Stain finish to cedar deck.	14	m2	3.57	50	1.43	20	5.00	70
.44	Stain finish to deck handrail and balustrade.	16	m	5.50	88	1.25	20	6.75	108
	SUB-TOTAL: PAINTING	**$19.49**	**/ m2**		**2,248**		**695**		**2,943**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	5.15	103	13.00	260	18.15	363
.20	Vanities and base cabinets.	7	m	42.57	298	417.14	2,920	459.71	3,218
.21	Kitchen wall cabinets.	4	m	42.50	170	229.00	916	271.50	1,086
	SUB-TOTAL: FITTINGS	**$30.91**	**/ m2**		**571**		**4,096**		**4,667**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.89	62	9.44	85	16.33	147
.20	Medicine cabinets.	2	No.	13.50	27	64.00	128	77.50	155
.25	Mirrors.	2	No.	13.50	27	84.00	168	97.50	195
.30	25 mm dia. chrome shower curtain rods.	2	No.	7.00	14	7.00	14	14.00	28
.40	Mail box and house numbers.	1	set	8.00	8	36.00	36	44.00	44
.50	18 mm dia. chrome coat rods.	6	No.	7.00	42	6.33	38	13.33	80
	SUB-TOTAL: SPECIALTIES	**$4.30**	**/ m2**		**180**		**469**		**649**
18	**APPLIANCES**								
.10	Range hood	1	No.	23.00	23	102.00	102	125.00	125
	SUB-TOTAL: APPLIANCES	**$0.83**	**/ m2**		**23**		**102**		**125**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,520.00	2,520	3,960.00	3,960	6,480.00	6,480
	SUB-TOTAL: PLUMBING	**$42.91**	**/ m2**		**2,520**		**3,960**		**6,480**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	900.00	900	2,520.00	2,520	3,420.00	3,420
	SUB-TOTAL: HEATING	**$22.65**	**/ m2**		**900**		**2,520**		**3,420**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **GRANDE PRAIRIE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,290.00	1,290	2,040.00	2,040	3,330.00	3,330
	SUB-TOTAL: ELECTRICAL	**$28.68**	**/ m2**		**1,290**		**3,040**		**4,330**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - GRANDE PRAIRIE	**$586.38**	**/ m2**		**25,751**		**62,793**		**88,544**

DETAILED COST ESTIMATES FOR HINTON

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.57	168	1.04	310	1.61	478
.11	Excavate trench for garage grade beam.	4	m3	4.00	16	11.00	44	15.00	60
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.11	82	4.00	296	5.11	378
.30	150mm gravel or sand bed under slab on grade.	25	m3	4.08	102	12.80	320	16.88	422
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.07	175	0.34	55	1.40	230
.50	Remove surplus excavated material from site.	223	m3	0.00	0	5.61	1,250	5.61	1,250
	SUB-TOTAL: EXCAVATION	**$18.66**	**/ m2**		**543**		**2,275**		**2,818**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	130.53	2,480	130.53	2,480
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	130.00	130	130.00	130
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	18.57	390	38.67	812	57.24	1,202

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **HINTON**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.89	232	0.89	232
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.89	32	0.89	32
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.35	100	1.35	100
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	34.55	1,382	14.95	598	49.50	1,980
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	12.69	330	6.08	158	18.77	488
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.62	416	9.29	836	13.91	1,252
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.78	428	12.70	940	18.49	1,368
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	64.00	64	276.00	276	340.00	340
.60	Parging to concrete walls.	10	m2	12.00	120	4.20	42	16.20	162

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	740.00	740	1,700.00	1,700	2,440.00	2,440
	SUB-TOTAL: CONCRETE	**$80.83**	**/ m2**		**3,870**		**8,336**		**12,206**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.63	80	1.04	132	1.67	212
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	5.38	242	1.56	70	6.93	312
	SUB-TOTAL: DAMPPROOFING	**$3.47**	**/ m2**		**322**		**202**		**524**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	8.59	1,280	14.50	2,160	23.09	3,440
.20	Prefinished perforated aluminum soffit.	44	m2	4.68	206	11.32	498	16.00	704
.30	Prefinished aluminum fascia.	70	m	1.03	72	2.80	196	3.83	268
.40	Brick facing to front elevation.	20	m2	60.20	1,204	48.75	975	108.95	2,179
	SUB-TOTAL: SIDING	**$43.65**	**/ m2**		**2,762**		**3,829**		**6,591**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.33	420	4.94	890	7.28	1,310
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	2.12	212	3.98	398	6.10	610
	SUB-TOTAL: ROOFING	**$12.72**	**/ m2**		**632**		**1,288**		**1,920**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	415.48	3,490	415.48	3,490
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	581.25	1,395	581.25	1,395
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.31	3,278	9.31	3,278
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.68	960	5.68	960
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	31.62	4,775	0.00	0	31.62	4,775

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 200 mm wide at rim joist.	56	m	0.54	30	0.96	54	1.50	84
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.00	38	28.00	56
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	580.00	580	450.00	640	1,220.00	1,220
	SUB-TOTAL: CARPENTRY (ROUGH)	**$101.05**	**/ m2**		**5,403**		**9,855**		**15,258**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	92.00	92	67.00	67	159.00	159
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	98.00	98	84.00	84	182.00	182
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	108.00	108	98.00	98	206.00	206
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	6.50	26	9.00	36	15.50	62

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	102.00	204	144.00	288	246.00	492
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.80	648	1.32	476	3.11	1,124
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	32.00	64	42.00	84	74.00	148
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.72**	**/ m2**		**1,240**		**1,133**		**2,373**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	592.00	592	592.00	592
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	268.33	1,610	268.33	1,610
	- 900 x 1550 mm	2	No.	0.00	0	310.00	620	310.00	620
	SUB-TOTAL: WINDOWS AND GLAZING	**$18.69**	**/ m2**		**0**		**2,822**		**2,822**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.50	55	0.30	33	0.81	88
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	1.07	16	0.40	6	1.47	22
	SUB-TOTAL: SEALANTS	**$0.73**	**/ m2**		**71**		**39**		**110**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	31.00	31	320.00	320	351.00	351
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	31.00	31	220.00	220	251.00	251
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	80.00	80	950.00	950	1,030.00	1,030
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	132.00	132	636.00	636	768.00	768

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	48.00	48	63.00	63
	- 711 x 2080 mm	3	No.	15.00	45	48.00	144	63.00	189
	- 762 x 2080 mm	6	No.	15.00	90	48.00	288	63.00	378
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	41.00	41	57.00	57
	- 1220 x 2080 mm	3	No.	12.00	36	70.00	210	82.00	246
	- 1320 x 2080 mm	1	No.	16.00	16	77.00	77	93.00	93
	-1524 x 2080 mm	1	No.	16.00	16	82.00	82	98.00	98
	- 1830 x 2080 mm	1	No.	16.00	16	95.00	95	111.00	111
	SUB-TOTAL: DOORS	**$24.07**	**/ m2**		**524**		**3,111**		**3,635**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	19.00	38	48.00	96	67.00	134
.20	Security deadbolt.	1	No.	20.00	20	35.00	35	55.00	55
.30	Latch sets.	7	sets	10.00	70	15.14	106	25.14	176
.40	Bathroom privacy latch sets.	3	sets	10.00	30	18.33	55	28.33	85
.60	Door stops.	11	No.	2.45	27	2.09	23	4.55	50
	SUB-TOTAL: HARDWARE	**$3.31**	**/ m2**		**185**		**315**		**500**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.46	2,190	3.60	2,280	7.06	4,470
.40	Finish to ceiling - textured.	138	m2	1.48	204	1.30	180	2.78	384
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.05	178	5.74	976	6.79	1,154
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.53	136	7.28	648	8.81	784
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.33	86	0.37	96	0.70	182
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.32	22	0.68	46
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.76	52	2.32	158	3.09	210
	SUB-TOTAL: WALLBOARD	**$47.88**	**/ m2**		**2,870**		**4,360**		**7,230**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.76	142	14.10	296	20.86	438
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.09	434	28.11	2,980	32.21	3,414
	SUB-TOTAL: FLOORING	**$25.51**	**/ m2**		**576**		**3,276**		**3,852**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.75	70	3.25	26	12.00	96
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	70.00	70	26.00	26	96.00	96
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.14	150	3.05	64	10.19	214
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.35	1,060	0.78	350	3.13	1,410
.30	Two coats semigloss on internal doors and frames.	10	No.	28.80	288	7.00	70	35.80	358
.35	Two coats semigloss on bi-fold doors.	7	No.	33.14	232	9.14	64	42.29	296

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.07	206	0.29	56	1.36	262
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.71	52	1.36	19	5.07	71
.44	Stain finish to deck handrail and balustrade.	16	m	6.00	96	1.19	19	7.19	115
	SUB-TOTAL: PAINTING	**$19.56**	**/ m2**		**2,249**		**704**		**2,953**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.90	98	11.40	228	16.30	326
.20	Vanities and base cabinets.	7	m	42.29	296	396.71	2,777	439.00	3,073
.21	Kitchen wall cabinets.	4	m	41.50	166	229.00	916	270.50	1,082
	SUB-TOTAL: FITTINGS	**$29.68**	**/ m2**		**560**		**3,921**		**4,481**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.56	59	9.44	85	16.00	144
.20	Medicine cabinets.	2	No.	14.00	28	64.00	128	78.00	156
.25	Mirrors.	2	No.	14.00	28	84.00	168	98.00	196
.30	25 mm dia. chrome shower curtain rods.	2	No.	7.50	15	7.50	15	15.00	30
.40	Mail box and house numbers.	1	set	9.00	9	35.00	35	44.00	44
.50	18 mm dia. chrome coat rods.	6	No.	7.50	45	6.33	38	13.83	83
	SUB-TOTAL: SPECIALTIES	**$4.32**	**/ m2**		**184**		**469**		**653**
18	**APPLIANCES**								
.10	Range hood	1	No.	26.00	26	106.00	106	132.00	132
	SUB-TOTAL: APPLIANCES	**$0.87**	**/ m2**		**26**		**106**		**132**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,725.00	2,725	3,860.00	3,860	6,585.00	6,585
	SUB-TOTAL: PLUMBING	**$43.61**	**/ m2**		**2,725**		**3,860**		**6,585**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	880.00	880	2,380.00	2,380	3,260.00	3,260
	SUB-TOTAL: HEATING	**$21.59**	**/ m2**		**880**		**2,380**		**3,260**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **HINTON**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,350.00	1,350	1,960.00	1,960	3,310.00	3,310
	SUB-TOTAL: ELECTRICAL	**$28.54**	**/ m2**		**1,350**		**2,960**		**4,310**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - HINTON	**$582.54**	**/ m2**		**26,972**		**60,991**		**87,963**

DETAILED COST ESTIMATES FOR LETHBRIDGE

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.48	144	1.89	560	2.37	704
.11	Excavate trench for garage grade beam.	4	m3	7.50	30	10.00	40	17.50	70
.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.92	68	3.78	280	4.70	348
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.60	90	19.20	480	22.80	570
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.00	164	0.31	51	1.31	215
.50	Remove surplus excavated material from site.	223	m3	0.00	0	5.83	1,300	5.83	1,300
	SUB-TOTAL: EXCAVATION	**$21.24**	**/ m2**		**496**		**2,711**		**3,207**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	95.05	1,806	95.05	1,806
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	96.00	96	96.00	96
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	20.79	437	33.24	698	54.03	1,135

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.85	222	0.85	222
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.86	31	0.86	31
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.30	96	1.30	96
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	28.75	1,150	14.00	560	42.75	1,710
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.77	254	5.69	148	15.46	402
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.96	356	6.76	608	10.71	964
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.95	366	9.78	724	14.73	1,090
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	62.00	62	275.00	275	337.00	337
.60	Parging to concrete walls.	10	m2	11.20	112	4.00	40	15.20	152

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	699.00	699	1,795.00	1,795	2,494.00	2,494
	SUB-TOTAL: CONCRETE	**$69.77**	**/ m2**		**3,436**		**7,099**		**10,535**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.61	78	1.01	128	1.62	206
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	5.07	228	1.64	74	6.71	302
	SUB-TOTAL: DAMPPROOFING	**$3.36**	**/ m2**		**306**		**202**		**508**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	5.65	842	13.99	2,084	19.64	2,926
.20	Prefinished perforated aluminum soffit.	44	m2	5.14	226	11.09	488	16.23	714
.30	Prefinished aluminum fascia.	70	m	1.21	85	3.07	215	4.29	300
.40	Brick facing to front elevation.	20	m2	53.00	1,060	42.00	840	95.00	1,900
	SUB-TOTAL: SIDING	**$38.68**	**/ m2**		**2,213**		**3,627**		**5,840**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.79	502	4.78	860	7.57	1,362
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	2.04	204	3.96	396	6.00	600
	SUB-TOTAL: ROOFING	**$12.99**	**/ m2**		**706**		**1,256**		**1,962**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	461.90	3,880	461.90	3,880
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	650.00	1,560	650.00	1,560
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.41	2,960	8.41	2,960
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.44	920	5.44	920
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.87	4,360	0.00	0	28.87	4,360

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.46	26	0.89	50	1.36	76
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	8.00	16	18.00	36	26.00	52
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	496.00	496	450.00	700	1,196.00	1,196
	SUB-TOTAL: CARPENTRY (ROUGH)	**$99.36**	**/ m2**		**4,898**		**10,106**		**15,004**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	86.00	86	78.00	78	164.00	164
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	89.00	89	97.00	97	186.00	186
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	91.00	91	112.00	112	203.00	203
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	5.00	20	9.00	36	14.00	56

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	120.00	240	148.00	296	268.00	536
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.44	520	1.42	512	2.86	1,032
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.00	56	47.00	94	75.00	150
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.41**	**/ m2**		**1,102**		**1,225**		**2,327**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	590.00	590	590.00	590
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	270.83	1,625	270.83	1,625
	- 900 x 1550 mm	2	No.	0.00	0	307.50	615	307.50	615
	SUB-TOTAL: WINDOWS AND GLAZING	**$18.74**	**/ m2**		**0**		**2,830**		**2,830**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.48	52	0.30	33	0.78	85
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	1.00	15	0.40	6	1.40	21
	SUB-TOTAL: SEALANTS	**$0.70**	**/ m2**		**67**		**39**		**106**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	290.00	290	318.00	318
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	240.00	240	268.00	268
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	70.00	70	960.00	960	1,030.00	1,030
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	112.00	112	615.00	615	727.00	727

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	41.00	41	56.00	56
	- 711 x 2080 mm	3	No.	15.00	45	41.33	124	56.33	169
	- 762 x 2080 mm	6	No.	15.00	90	41.33	248	56.33	338
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	12.00	12	39.00	39	51.00	51
	- 1220 x 2080 mm	3	No.	12.00	36	70.00	210	82.00	246
	- 1320 x 2080 mm	1	No.	12.00	12	75.00	75	87.00	87
	-1524 x 2080 mm	1	No.	12.00	12	77.00	77	89.00	89
	- 1830 x 2080 mm	1	No.	12.00	12	84.00	84	96.00	96
	SUB-TOTAL: DOORS	**$23.01**	**/ m2**		**472**		**3,003**		**3,475**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	17.50	35	46.50	93	64.00	128
.20	Security deadbolt.	1	No.	18.00	18	32.00	32	50.00	50
.30	Latch sets.	7	sets	10.29	72	14.43	101	24.71	173
.40	Bathroom privacy latch sets.	3	sets	10.67	32	17.00	51	27.67	83
.60	Door stops.	11	No.	2.27	25	1.91	21	4.18	46
	SUB-TOTAL: HARDWARE	**$3.18**	**/ m2**		**182**		**298**		**480**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.88	1,820	3.60	2,280	6.48	4,100
.40	Finish to ceiling - textured.	138	m2	1.45	200	1.36	188	2.81	388
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.13	192	5.36	912	6.49	1,104
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.46	130	6.81	606	8.27	736
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.38	98	0.37	95	0.75	193
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.37	25	0.31	21	0.68	46
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.74	50	2.29	156	3.03	206
	SUB-TOTAL: WALLBOARD	**$44.85**	**/ m2**		**2,515**		**4,258**		**6,773**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.76	142	13.14	276	19.90	418
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.34	460	27.17	2,880	31.51	3,340
	SUB-TOTAL: FLOORING	**$24.89**	**/ m2**		**602**		**3,156**		**3,758**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	9.00	72	3.00	24	12.00	96
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	70.00	70	24.00	24	94.00	94
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	8.38	176	3.14	66	11.52	242
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.57	1,160	0.75	338	3.32	1,498
.30	Two coats semigloss on internal doors and frames.	10	No.	28.00	280	6.60	66	34.60	346
.35	Two coats semigloss on bi-fold doors.	7	No.	35.14	246	9.43	66	44.57	312

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.06	204	0.26	50	1.32	254
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.43	48	1.29	18	4.71	66
.44	Stain finish to deck handrail and balustrade.	16	m	5.25	84	1.13	18	6.38	102
	SUB-TOTAL: PAINTING	**$20.17**	**/ m2**		**2,365**		**680**		**3,045**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.40	88	13.00	260	17.40	348
.20	Vanities and base cabinets.	7	m	36.57	256	465.71	3,260	502.29	3,516
.21	Kitchen wall cabinets.	4	m	37.00	148	245.00	980	282.00	1,128
	SUB-TOTAL: FITTINGS	**$33.06**	**/ m2**		**492**		**4,500**		**4,992**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.22	56	9.22	83	15.44	139
.20	Medicine cabinets.	2	No.	13.00	26	63.00	126	76.00	152
.25	Mirrors.	2	No.	13.00	26	84.00	168	97.00	194
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	6.00	12	12.00	24
.40	Mail box and house numbers.	1	set	6.00	6	34.00	34	40.00	40
.50	18 mm dia. chrome coat rods.	6	No.	6.00	36	6.00	36	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.11**	**/ m2**		**162**		**459**		**621**
18	**APPLIANCES**								
.10	Range hood	1	No.	22.00	22	90.00	90	112.00	112
	SUB-TOTAL: APPLIANCES	**$0.74**	**/ m2**		**22**		**90**		**112**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,200.00	2,200	3,820.00	3,820	6,020.00	6,020
	SUB-TOTAL: PLUMBING	**$39.87**	**/ m2**		**2,200**		**3,820**		**6,020**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	880.00	880	2,180.00	2,180	3,060.00	3,060
	SUB-TOTAL: HEATING	**$20.26**	**/ m2**		**880**		**2,180**		**3,060**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LETHBRIDGE**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,150.00	1,150	1,935.00	1,935	3,085.00	3,085
	SUB-TOTAL: ELECTRICAL	**$27.05**	**/ m2**		**1,150**		**2,935**		**4,085**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - LETHBRIDGE	**$559.53**	**/ m2**		**24,266**		**60,224**		**84,490**

DETAILED COST ESTIMATES FOR LLOYDMINSTER

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.47	140	1.60	476	2.07	616
.11	Excavate trench for garage grade beam.	4	m3	5.00	20	13.50	54	18.50	74
.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.89	66	3.54	262	4.43	328
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.40	85	13.40	335	16.80	420
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	0.98	160	0.37	60	1.34	220
.50	Remove surplus excavated material from site.	223	m3	0.00	0	4.71	1,050	4.71	1,050
	SUB-TOTAL: EXCAVATION	**$17.93**	**/ m2**		**471**		**2,237**		**2,708**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	122.11	2,320	122.11	2,320
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	122.00	122	122.00	122
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	13.71	288	42.76	898	56.48	1,186

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.88	230	0.88	230
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.89	32	0.89	32
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.34	99	1.34	99
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	25.80	1,032	13.00	520	38.80	1,552
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	8.92	232	5.38	140	14.31	372
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.56	320	7.42	668	10.98	988
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.43	328	10.54	780	14.97	1,108
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	55.00	55	250.00	250	305.00	305
.60	Parging to concrete walls.	10	m2	9.80	98	4.40	44	14.20	142

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	580.00	580	1,930.00	1,675	2,255.00	2,255
	SUB-TOTAL: CONCRETE	**$70.93**	**/ m2**		**2,933**		**7,778**		**10,711**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.55	70	0.98	124	1.53	194
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	3.78	170	1.82	82	5.60	252
	SUB-TOTAL: DAMPPROOFING	**$2.95**	**/ m2**		**240**		**206**		**446**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	6.09	908	13.96	2,080	20.05	2,988
.20	Prefinished perforated aluminum soffit.	44	m2	5.82	256	12.80	563	18.61	819
.30	Prefinished aluminum fascia.	70	m	1.07	75	2.83	198	3.90	273
.40	Brick facing to front elevation.	20	m2	48.40	968	44.30	886	92.70	1,854
	SUB-TOTAL: SIDING	**$39.30**	**/ m2**		**2,207**		**3,727**		**5,934**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.53	456	4.89	880	7.42	1,336
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.76	176	4.16	416	5.92	592
	SUB-TOTAL: ROOFING	**$12.77**	**/ m2**		**632**		**1,296**		**1,928**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	434.29	3,648	434.29	3,648
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	600.00	1,440	600.00	1,440
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.49	2,988	8.49	2,988
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.24	886	5.24	886
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	24.37	3,680	0.00	0	24.37	3,680

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.46	26	0.93	52	1.39	78
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	8.00	16	19.50	39	27.50	55
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	428.00	428	450.00	656	1,084.00	1,084
	SUB-TOTAL: CARPENTRY (ROUGH)	**$91.78**	**/ m2**		**4,150**		**9,709**		**13,859**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	80.00	80	75.00	75	155.00	155
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	82.00	82	90.00	90	172.00	172
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	84.00	84	104.00	104	188.00	188
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	6.50	26	9.75	39	16.25	65

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	87.50	175	148.00	296	235.50	471
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.33	480	1.46	526	2.79	1,006
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	28.00	56	48.00	96	76.00	152
	SUB-TOTAL: CARPENTRY (FINISH)	**$14.63**	**/ m2**		**983**		**1,226**		**2,209**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	599.00	599	599.00	599
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings. - 900 x 1250 mm	6	No.	0.00	0	275.00	1,650	275.00	1,650
	- 900 x 1550 mm	2	No.	0.00	0	318.00	636	318.00	636
	SUB-TOTAL: WINDOWS AND GLAZING	**$19.11**	**/ m2**		**0**		**2,885**		**2,885**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.46	50	0.31	34	0.77	84
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	0.93	14	0.40	6	1.33	20
	SUB-TOTAL: SEALANTS	**$0.69**	**/ m2**		**64**		**40**		**104**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	288.00	288	316.00	316
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	250.00	250	278.00	278
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	66.00	66	945.00	945	1,011.00	1,011
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	112.00	112	620.00	620	732.00	732

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	14.00	14	42.00	42	56.00	56
	- 711 x 2080 mm	3	No.	14.00	42	42.00	126	56.00	168
	- 762 x 2080 mm	6	No.	14.00	84	43.00	258	57.00	342
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	14.00	14	42.00	42	56.00	56
	- 1220 x 2080 mm	3	No.	14.00	42	73.33	220	87.33	262
	- 1320 x 2080 mm	1	No.	14.00	14	77.00	77	91.00	91
	-1524 x 2080 mm	1	No.	14.00	14	82.00	82	96.00	96
	- 1830 x 2080 mm	1	No.	14.00	14	94.00	94	108.00	108
	SUB-TOTAL: DOORS	**$23.28**	**/ m2**		**472**		**3,044**		**3,516**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	18.00	36	47.00	94	65.00	130
.20	Security deadbolt.	1	No.	18.00	18	33.00	33	51.00	51
.30	Latch sets.	7	sets	9.86	69	14.86	104	24.71	173
.40	Bathroom privacy latch sets.	3	sets	9.67	29	17.67	53	27.33	82
.60	Door stops.	11	No.	2.18	24	2.00	22	4.18	46
	SUB-TOTAL: HARDWARE	**$3.19**	**/ m2**		**176**		**306**		**482**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.20	2,025	3.54	2,240	6.74	4,265
.40	Finish to ceiling - textured.	138	m2	1.39	192	1.28	176	2.67	368
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.05	178	5.62	956	6.67	1,134
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.55	138	7.25	645	8.80	783
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.35	90	0.37	96	0.72	186
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.32	22	0.68	46
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.76	52	2.32	158	3.09	210
	SUB-TOTAL: WALLBOARD	**$46.30**	**/ m2**		**2,699**		**4,293**		**6,992**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.57	138	13.62	286	20.19	424
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.38	464	27.92	2,960	32.30	3,424
	SUB-TOTAL: FLOORING	**$25.48**	**/ m2**		**602**		**3,246**		**3,848**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.75	70	3.13	25	11.88	95
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	80.00	80	25.00	25	105.00	105
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.90	166	3.05	64	10.95	230
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.35	1,060	0.75	340	3.10	1,400
.30	Two coats semigloss on internal doors and frames.	10	No.	24.40	244	6.60	66	31.00	310
.35	Two coats semigloss on bi-fold doors.	7	No.	30.86	216	9.14	64	40.00	280

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.94	182	0.28	54	1.22	236
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.57	50	1.43	20	5.00	70
.44	Stain finish to deck handrail and balustrade.	16	m	5.25	84	1.25	20	6.50	104
	SUB-TOTAL: PAINTING	**$18.97**	**/ m2**		**2,177**		**688**		**2,865**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.90	98	12.80	256	17.70	354
.20	Vanities and base cabinets.	7	m	39.43	276	417.86	2,925	457.29	3,201
.21	Kitchen wall cabinets.	4	m	36.00	144	216.00	864	252.00	1,008
	SUB-TOTAL: FITTINGS	**$30.22**	**/ m2**		**518**		**4,045**		**4,563**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.11	55	8.44	76	14.56	131
.20	Medicine cabinets.	2	No.	12.50	25	65.00	130	77.50	155
.25	Mirrors.	2	No.	12.50	25	84.00	168	96.50	193
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	7.00	14	13.00	26
.40	Mail box and house numbers.	1	set	6.00	6	35.00	35	41.00	41
.50	18 mm dia. chrome coat rods.	6	No.	6.00	36	6.33	38	12.33	74
	SUB-TOTAL: SPECIALTIES	**$4.11**	**/ m2**		**159**		**461**		**620**
18	**APPLIANCES**								
.10	Range hood	1	No.	24.00	24	105.00	105	129.00	129
	SUB-TOTAL: APPLIANCES	**$0.85**	**/ m2**		**24**		**105**		**129**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,088.00	2,088	3,780.00	3,780	5,868.00	5,868
	SUB-TOTAL: PLUMBING	**$38.86**	**/ m2**		**2,088**		**3,780**		**5,868**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	780.00	780	2,280.00	2,280	3,060.00	3,060
	SUB-TOTAL: HEATING	**$20.26**	**/ m2**		**780**		**2,280**		**3,060**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **LLOYDMINSTER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,240.00	1,240	2,000.00	2,000	3,240.00	3,240
	SUB-TOTAL: ELECTRICAL	**$28.08**	**/ m2**		**1,240**		**3,000**		**4,240**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - LLOYDMINSTER	**$547.79**	**/ m2**		**22,615**		**60,102**		**82,717**

DETAILED COST ESTIMATES FOR MEDICINE HAT

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.65	192	1.48	440	2.13	632
.11	Excavate trench for garage grade beam.	4	m3	7.00	28	9.00	36	16.00	64
.20	Backfill to basement walls, footings, and grade beams.	74	m3	0.81	60	1.62	120	2.43	180
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.68	92	18.00	450	21.68	542
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.01	166	0.30	50	1.32	216
.50	Remove surplus excavated material from site.	223	m3	0.00	0	7.17	1,600	7.17	1,600
	SUB-TOTAL: EXCAVATION	**$21.42**	**/ m2**		**538**		**2,696**		**3,234**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	110.53	2,100	110.53	2,100
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	110.00	110	110.00	110
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	16.43	345	38.57	810	55.00	1,155

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE

GROSS FLOOR AREA: 151 m2

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.86	225	0.86	225
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.86	31	0.86	31
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.49	110	1.49	110
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	32.40	1,296	14.20	568	46.60	1,864
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	11.08	288	5.81	151	16.88	439
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.40	396	7.78	700	12.18	1,096
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.46	404	9.20	681	14.66	1,085
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	62.00	62	260.00	260	322.00	322
.60	Parging to concrete walls.	10	m2	11.00	110	4.00	40	15.00	150

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	742.00	742	1,920.00	1,920	2,662.00	2,662
	SUB-TOTAL: CONCRETE	**$75.16**	**/ m2**		**3,643**		**7,706**		**11,349**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.61	78	1.01	128	1.62	206
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.40	198	1.33	60	5.73	258
	SUB-TOTAL: DAMPPROOFING	**$3.07**	**/ m2**		**276**		**188**		**464**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	5.44	810	13.83	2,060	19.26	2,870
.20	Prefinished perforated aluminum soffit.	44	m2	4.86	214	14.77	650	19.64	864
.30	Prefinished aluminum fascia.	70	m	1.60	112	3.03	212	4.63	324
.40	Brick facing to front elevation.	20	m2	51.30	1,026	42.20	844	93.50	1,870
	SUB-TOTAL: SIDING	**$39.26**	**/ m2**		**2,162**		**3,766**		**5,928**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	3.00	540	5.14	926	8.14	1,466
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.88	188	4.00	400	5.88	588
	SUB-TOTAL: ROOFING	**$13.60**	**/ m2**		**728**		**1,326**		**2,054**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	452.38	3,800	452.38	3,800
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	631.67	1,516	631.67	1,516
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	8.03	2,826	8.03	2,826
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.34	902	5.34	902
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	24.90	3,760	0.00	0	24.90	3,760

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.45	25	0.93	52	1.38	77
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	8.00	16	16.00	32	24.00	48
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	508.00	508	450.00	660	1,168.00	1,168
	SUB-TOTAL: CARPENTRY (ROUGH)	**$93.36**	**/ m2**		**4,309**		**9,788**		**14,097**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	88.00	88	75.00	75	163.00	163
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	92.00	92	94.00	94	186.00	186
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	94.00	94	110.00	110	204.00	204
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	5.00	20	9.25	37	14.25	57

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	110.00	220	146.00	292	256.00	512
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.43	516	1.40	506	2.83	1,022
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	29.50	59	45.00	90	74.50	149
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.19**	**/ m2**		**1,089**		**1,204**		**2,293**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	594.00	594	594.00	594
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings. - 900 x 1250 mm - 900 x 1550 mm	6 2	No. No.	0.00 0.00	0 0	274.17 315.00	1,645 630	274.17 315.00	1,645 630
	SUB-TOTAL: WINDOWS AND GLAZING	**$19.00**	**/ m2**		**0**		**2,869**		**2,869**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.46	50	0.30	33	0.76	83
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	0.93	14	0.40	6	1.33	20
	SUB-TOTAL: SEALANTS	**$0.68**	**/ m2**		**64**		**39**		**103**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	286.00	286	314.00	314
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	256.00	256	284.00	284
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	73.00	73	950.00	950	1,023.00	1,023
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	112.00	112	625.00	625	737.00	737

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	14.00	14	42.00	42	56.00	56
	- 711 x 2080 mm	3	No.	14.00	42	42.00	126	56.00	168
	- 762 x 2080 mm	6	No.	14.00	84	42.50	255	56.50	339
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	40.00	40	56.00	56
	- 1220 x 2080 mm	3	No.	12.00	36	70.67	212	82.67	248
	- 1320 x 2080 mm	1	No.	16.00	16	77.00	77	93.00	93
	-1524 x 2080 mm	1	No.	16.00	16	79.00	79	95.00	95
	- 1830 x 2080 mm	1	No.	16.00	16	86.00	86	102.00	102
	SUB-TOTAL: DOORS	**$23.28**	**/ m2**		**481**		**3,034**		**3,515**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	18.50	37	46.50	93	65.00	130
.20	Security deadbolt.	1	No.	19.00	19	32.00	32	51.00	51
.30	Latch sets.	7	sets	10.29	72	14.43	101	24.71	173
.40	Bathroom privacy latch sets.	3	sets	10.33	31	17.00	51	27.33	82
.60	Door stops.	11	No.	2.55	28	1.91	21	4.45	49
	SUB-TOTAL: HARDWARE	**$3.21**	**/ m2**		**187**		**298**		**485**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	2.91	1,845	3.67	2,325	6.59	4,170
.40	Finish to ceiling - textured.	138	m2	1.46	202	1.27	175	2.73	377
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.12	190	5.09	866	6.21	1,056
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.49	133	7.10	632	8.60	765
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.38	98	0.32	82	0.69	180
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.38	26	0.26	18	0.65	44
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.76	52	2.88	196	3.65	248
	SUB-TOTAL: WALLBOARD	**$45.30**	**/ m2**		**2,546**		**4,294**		**6,840**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.90	145	13.33	280	20.24	425
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.48	475	27.83	2,950	32.31	3,425
	SUB-TOTAL: FLOORING	**$25.50**	**/ m2**		**620**		**3,230**		**3,850**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.50	68	3.00	24	11.50	92
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	78.00	78	24.00	24	102.00	102
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	6.67	140	3.00	63	9.67	203
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.35	1,060	0.73	330	3.08	1,390
.30	Two coats semigloss on internal doors and frames.	10	No.	27.60	276	6.80	68	34.40	344
.35	Two coats semigloss on bi-fold doors.	7	No.	34.86	244	8.57	60	43.43	304

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.02	196	0.26	50	1.27	246
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.43	48	1.29	18	4.71	66
.44	Stain finish to deck handrail and balustrade.	16	m	5.13	82	1.13	18	6.25	100
	SUB-TOTAL: PAINTING	**$19.09**	**/ m2**		**2,217**		**665**		**2,882**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.75	95	13.00	260	17.75	355
.20	Vanities and base cabinets.	7	m	40.57	284	421.43	2,950	462.00	3,234
.21	Kitchen wall cabinets.	4	m	40.50	162	215.00	860	255.50	1,022
	SUB-TOTAL: FITTINGS	**$30.54**	**/ m2**		**541**		**4,070**		**4,611**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.00	54	9.22	83	15.22	137
.20	Medicine cabinets.	2	No.	12.50	25	63.00	126	75.50	151
.25	Mirrors.	2	No.	12.50	25	84.00	168	96.50	193
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	6.00	12	12.00	24
.40	Mail box and house numbers.	1	set	6.00	6	34.00	34	40.00	40
.50	18 mm dia. chrome coat rods.	6	No.	6.00	36	6.00	36	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.09**	**/ m2**		**158**		**459**		**617**
18	**APPLIANCES**								
.10	Range hood	1	No.	20.00	20	95.00	95	115.00	115
	SUB-TOTAL: APPLIANCES	**$0.76**	**/ m2**		**20**		**95**		**115**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,360.00	2,360	3,675.00	3,675	6,035.00	6,035
	SUB-TOTAL: PLUMBING	**$39.97**	**/ m2**		**2,360**		**3,675**		**6,035**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	850.00	850	2,200.00	2,200	3,050.00	3,050
	SUB-TOTAL: HEATING	**$20.20**	**/ m2**		**850**		**2,200**		**3,050**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **MEDICINE HAT**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,350.00	1,350	1,956.00	1,956	3,306.00	3,306
	SUB-TOTAL: ELECTRICAL	**$28.52**	**/ m2**		**1,350**		**2,956**		**4,306**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - MEDICINE HAT	**$559.25**	**/ m2**		**24,139**		**60,308**		**84,447**

DETAILED COST ESTIMATES FOR PEACE RIVER

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.71	210	1.14	340	1.85	550
.11	Excavate trench for garage grade beam.	4	m3	5.50	22	8.50	34	14.00	56
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.11	82	1.76	130	2.86	212
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.96	99	19.20	480	23.16	579
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.15	188	0.34	56	1.49	244
.50	Remove surplus excavated material from site.	223	m3	0.00	0	5.38	1,200	5.38	1,200
	SUB-TOTAL: EXCAVATION	**$18.81**	**/ m2**		**601**		**2,240**		**2,841**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	112.63	2,140	112.63	2,140
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	112.00	112	112.00	112
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	18.00	378	36.00	756	54.00	1,134

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.91	238	0.91	238
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.94	34	0.94	34
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.46	108	1.46	108
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	27.95	1,118	13.65	546	41.60	1,664
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	9.85	256	5.85	152	15.69	408
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	4.04	364	8.44	760	12.49	1,124
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.00	370	12.43	920	17.43	1,290
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	60.00	60	250.00	250	310.00	310
.60	Parging to concrete walls.	10	m2	11.00	110	4.80	48	15.80	158

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	720.00	720	1,880.00	1,880	2,600.00	2,600
	SUB-TOTAL: CONCRETE	**$74.97**	**/ m2**		**3,376**		**7,944**		**11,320**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.65	82	1.06	135	1.71	217
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	5.42	244	1.82	82	7.24	326
	SUB-TOTAL: DAMPPROOFING	**$3.60**	**/ m2**		**326**		**217**		**543**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	7.62	1,136	15.52	2,312	23.14	3,448
.20	Prefinished perforated aluminum soffit.	44	m2	6.55	288	11.82	520	18.36	808
.30	Prefinished aluminum fascia.	70	m	1.29	90	3.06	214	4.34	304
.40	Brick facing to front elevation.	20	m2	54.00	1,080	48.00	960	102.00	2,040
	SUB-TOTAL: SIDING	**$43.71**	**/ m2**		**2,594**		**4,006**		**6,600**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.49	448	5.28	950	7.77	1,398
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	2.08	208	5.50	550	7.58	758
	SUB-TOTAL: ROOFING	**$14.28**	**/ m2**		**656**		**1,500**		**2,156**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	478.57	4,020	478.57	4,020
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	650.00	1,560	650.00	1,560
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	9.43	3,320	9.43	3,320
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.31	898	5.31	898
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	32.85	4,960	0.00	0	32.85	4,960

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.54	30	0.96	54	1.50	84
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	10.00	20	20.00	40	30.00	60
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	556.00	556	450.00	640	1,196.00	1,196
	SUB-TOTAL: CARPENTRY (ROUGH)	**$106.61**	**/ m2**		**5,566**		**10,532**		**16,098**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	95.00	95	68.00	68	163.00	163
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	99.00	99	86.00	86	185.00	185
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	100.00	100	99.00	99	199.00	199
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	5.25	21	9.25	37	14.50	58

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	94.00	188	148.00	296	242.00	484
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.80	648	1.30	470	3.10	1,118
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	31.50	63	42.00	84	73.50	147
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.59**	**/ m2**		**1,214**		**1,140**		**2,354**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	656.00	656	656.00	656
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings. - 900 x 1250 mm	6	No.	0.00	0	293.33	1,760	293.33	1,760
	- 900 x 1550 mm	2	No.	0.00	0	360.00	720	360.00	720
	SUB-TOTAL: WINDOWS AND GLAZING	**$20.77**	**/ m2**		**0**		**3,136**		**3,136**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.46	50	0.33	36	0.79	86
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	1.20	18	0.47	7	1.67	25
	SUB-TOTAL: SEALANTS	**$0.74**	**/ m2**		**68**		**43**		**111**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	29.00	29	356.00	356	385.00	385
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	29.00	29	255.00	255	284.00	284
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	75.00	75	1,120.00	1,120	1,195.00	1,195
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	128.00	128	660.00	660	788.00	788

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	51.00	51	66.00	66
	- 711 x 2080 mm	3	No.	15.00	45	51.00	153	66.00	198
	- 762 x 2080 mm	6	No.	15.00	90	50.50	303	65.50	393
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	16.00	16	46.00	46	62.00	62
	- 1220 x 2080 mm	3	No.	12.00	36	85.33	256	97.33	292
	- 1320 x 2080 mm	1	No.	16.00	16	92.00	92	108.00	108
	-1524 x 2080 mm	1	No.	16.00	16	98.00	98	114.00	114
	- 1830 x 2080 mm	1	No.	16.00	16	108.00	108	124.00	124
	SUB-TOTAL: DOORS	**$26.55**	**/ m2**		**511**		**3,498**		**4,009**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	20.00	40	48.00	96	68.00	136
.20	Security deadbolt.	1	No.	20.00	20	35.00	35	55.00	55
.30	Latch sets.	7	sets	10.00	70	15.00	105	25.00	175
.40	Bathroom privacy latch sets.	3	sets	10.33	31	18.00	54	28.33	85
.60	Door stops.	11	No.	2.36	26	2.09	23	4.45	49
	SUB-TOTAL: HARDWARE	**$3.31**	**/ m2**		**187**		**313**		**500**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.22	2,040	3.85	2,440	7.08	4,480
.40	Finish to ceiling - textured.	138	m2	1.59	220	1.35	186	2.94	406
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.03	175	5.79	985	6.82	1,160
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.69	150	7.53	670	9.21	820
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.39	102	0.37	95	0.76	197
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.41	28	0.31	21	0.72	49
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.85	58	2.29	156	3.15	214
	SUB-TOTAL: WALLBOARD	**$48.52**	**/ m2**		**2,773**		**4,553**		**7,326**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	7.33	154	14.19	298	21.52	452
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.68	496	31.70	3,360	36.38	3,856
	SUB-TOTAL: FLOORING	**$28.53**	**/ m2**		**650**		**3,658**		**4,308**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	9.25	74	3.13	25	12.38	99
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	72.00	72	25.00	25	97.00	97
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	8.33	175	3.24	68	11.57	243
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.48	1,120	0.76	342	3.24	1,462
.30	Two coats semigloss on internal doors and frames.	10	No.	28.60	286	7.20	72	35.80	358
.35	Two coats semigloss on bi-fold doors.	7	No.	39.14	274	9.43	66	48.57	340

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.07	206	0.30	58	1.37	264
.41	Prepare, prime, one coat semigloss on handrails.	4	m	3.00	12	1.50	6	4.50	18
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	8.00	16	3.00	6	11.00	22
.43	Stain finish to cedar deck.	14	m2	3.86	54	1.50	21	5.36	75
.44	Stain finish to deck handrail and balustrade.	16	m	6.00	96	1.31	21	7.31	117
	SUB-TOTAL: PAINTING	**$20.50**	**/ m2**		**2,385**		**710**		**3,095**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	5.20	104	13.75	275	18.95	379
.20	Vanities and base cabinets.	7	m	44.57	312	457.14	3,200	501.71	3,512
.21	Kitchen wall cabinets.	4	m	46.25	185	255.00	1,020	301.25	1,205
	SUB-TOTAL: FITTINGS	**$33.75**	**/ m2**		**601**		**4,495**		**5,096**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **PEACE RIVER**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	7.33	66	9.44	85	16.78	151
.20	Medicine cabinets.	2	No.	14.00	28	72.00	144	86.00	172
.25	Mirrors.	2	No.	14.00	28	90.00	180	104.00	208
.30	25 mm dia. chrome shower curtain rods.	2	No.	7.50	15	7.50	15	15.00	30
.40	Mail box and house numbers.	1	set	8.00	8	37.00	37	45.00	45
.50	18 mm dia. chrome coat rods.	6	No.	5.33	32	6.67	40	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.49**	**/ m2**		**177**		**501**		**678**
18	**APPLIANCES**								
.10	Range hood	1	No.	25.00	25	102.00	102	127.00	127
	SUB-TOTAL: APPLIANCES	**$0.84**	**/ m2**		**25**		**102**		**127**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,650.00	2,650	4,120.00	4,120	6,770.00	6,770
	SUB-TOTAL: PLUMBING	**$44.83**	**/ m2**		**2,650**		**4,120**		**6,770**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	898.00	898	2,600.00	2,600	3,498.00	3,498
	SUB-TOTAL: HEATING	**$23.17**	**/ m2**		**898**		**2,600**		**3,498**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **PEACE RIVER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,340.00	1,340	2,060.00	2,060	3,400.00	3,400
	SUB-TOTAL: ELECTRICAL	**$29.14**	**/ m2**		**1,340**		**3,060**		**4,400**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - PEACE RIVER	**$600.77**	**/ m2**		**26,598**		**64,118**		**90,716**

DETAILED COST ESTIMATES FOR RED DEER

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.56	166	1.31	390	1.87	556
.11	Excavate trench for garage grade beam.	4	m3	5.00	20	12.50	50	17.50	70
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.22	90	3.59	266	4.81	356
.30	150mm gravel or sand bed under slab on grade.	25	m3	3.92	98	12.80	320	16.72	418
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.01	165	0.30	50	1.31	215
.50	Remove surplus excavated material from site.	223	m3	0.00	0	5.74	1,280	5.74	1,280
	SUB-TOTAL: EXCAVATION	**$19.17**	**/ m2**		**539**		**2,356**		**2,895**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	100.63	1,912	100.63	1,912
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	102.00	102	102.00	102
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	15.24	320	35.43	744	50.67	1,064

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.85	222	0.85	222
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.89	32	0.89	32
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.35	100	1.35	100
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	30.00	1,200	12.20	488	42.20	1,688
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	10.23	266	5.38	140	15.62	406
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.72	335	7.18	646	10.90	981
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	4.86	360	10.34	765	15.20	1,125
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	60.00	60	245.00	245	305.00	305
.60	Parging to concrete walls.	10	m2	10.60	106	4.00	40	14.60	146

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	620.00	620	1,580.00	1,580	2,200.00	2,200
	SUB-TOTAL: CONCRETE	**$68.10**	**/ m2**		**3,267**		**7,016**		**10,283**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.59	75	1.01	128	1.60	203
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	4.67	210	1.44	65	6.11	275
	SUB-TOTAL: DAMPPROOFING	**$3.17**	**/ m2**		**285**		**193**		**478**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	5.47	815	14.50	2,160	19.97	2,975
.20	Prefinished perforated aluminum soffit.	44	m2	4.50	198	10.82	476	15.32	674
.30	Prefinished aluminum fascia.	70	m	1.07	75	2.69	188	3.76	263
.40	Brick facing to front elevation.	20	m2	58.00	1,160	49.00	980	107.00	2,140
	SUB-TOTAL: SIDING	**$40.08**	**/ m2**		**2,248**		**3,804**		**6,052**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.67	480	5.11	920	7.78	1,400
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	2.00	200	4.32	432	6.32	632
	SUB-TOTAL: ROOFING	**$13.46**	**/ m2**		**680**		**1,352**		**2,032**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	457.14	3,840	457.14	3,840
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 grade fir or better.	2.4	MFBM	0.00	0	633.33	1,520	633.33	1,520
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	7.64	2,690	7.64	2,690
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	5.03	850	5.03	850
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	28.87	4,360	0.00	0	28.87	4,360

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.54	30	0.93	52	1.46	82
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.00	38	28.00	56
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	525.00	525	450.00	615	1,140.00	1,140
	SUB-TOTAL: CARPENTRY (ROUGH)	**$96.28**	**/ m2**		**4,933**		**9,605**		**14,538**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	90.00	90	66.00	66	156.00	156
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	95.00	95	83.00	83	178.00	178
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	96.00	96	97.00	97	193.00	193
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	5.50	22	9.00	36	14.50	58

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	88.00	176	144.00	288	232.00	464
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.59	575	1.37	495	2.96	1,070
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	30.00	60	43.00	86	73.00	146
	SUB-TOTAL: CARPENTRY (FINISH)	**$15.00**	**/ m2**		**1,114**		**1,151**		**2,265**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	594.00	594	594.00	594
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings. - 900 x 1250 mm	6	No.	0.00	0	275.00	1,650	275.00	1,650
	- 900 x 1550 mm	2	No.	0.00	0	314.00	628	314.00	628
	SUB-TOTAL: WINDOWS AND GLAZING	**$19.02**	**/ m2**		**0**		**2,872**		**2,872**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.44	48	0.30	33	0.74	81
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	0.87	13	0.40	6	1.27	19
	SUB-TOTAL: SEALANTS	**$0.66**	**/ m2**		**61**		**39**		**100**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	28.00	28	306.00	306	334.00	334
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	28.00	28	244.00	244	272.00	272
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	70.00	70	840.00	840	910.00	910
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	122.00	122	630.00	630	752.00	752

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	14.00	14	44.00	44	58.00	58
	- 711 x 2080 mm	3	No.	14.00	42	44.00	132	58.00	174
	- 762 x 2080 mm	6	No.	14.00	84	44.33	266	58.33	350
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	13.00	13	44.00	44	57.00	57
	- 1220 x 2080 mm	3	No.	13.00	39	77.33	232	90.33	271
	- 1320 x 2080 mm	1	No.	13.00	13	84.00	84	97.00	97
	-1524 x 2080 mm	1	No.	13.00	13	90.00	90	103.00	103
	- 1830 x 2080 mm	1	No.	13.00	13	98.00	98	111.00	111
	SUB-TOTAL: DOORS	**$23.11**	**/ m2**		**479**		**3,010**		**3,489**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	18.50	37	47.00	94	65.50	131
.20	Security deadbolt.	1	No.	19.00	19	33.00	33	52.00	52
.30	Latch sets.	7	sets	10.00	70	14.86	104	24.86	174
.40	Bathroom privacy latch sets.	3	sets	10.00	30	17.67	53	27.67	83
.60	Door stops.	11	No.	2.27	25	2.00	22	4.27	47
	SUB-TOTAL: HARDWARE	**$3.23**	**/ m2**		**181**		**306**		**487**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.13	1,984	3.44	2,180	6.58	4,164
.40	Finish to ceiling - textured.	138	m2	1.36	188	1.23	170	2.59	358
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.03	175	5.18	880	6.21	1,055
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.52	135	6.46	575	7.98	710
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.35	90	0.37	95	0.71	185
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.34	23	0.31	21	0.65	44
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.71	48	2.29	156	3.00	204
	SUB-TOTAL: WALLBOARD	**$44.50**	**/ m2**		**2,643**		**4,077**		**6,720**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.48	136	13.71	288	20.19	424
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.49	476	27.74	2,940	32.23	3,416
	SUB-TOTAL: FLOORING	**$25.43**	**/ m2**		**612**		**3,228**		**3,840**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.50	68	3.13	25	11.63	93
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	68.00	68	25.00	25	93.00	93
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.43	156	3.14	66	10.57	222
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.31	1,040	0.81	366	3.12	1,406
.30	Two coats semigloss on internal doors and frames.	10	No.	24.00	240	7.00	70	31.00	310
.35	Two coats semigloss on bi-fold doors.	7	No.	30.71	215	8.57	60	39.29	275

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	0.98	190	0.30	58	1.28	248
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.57	50	1.43	20	5.00	70
.44	Stain finish to deck handrail and balustrade.	16	m	5.38	86	1.25	20	6.63	106
	SUB-TOTAL: PAINTING	**$18.93**	**/ m2**		**2,138**		**720**		**2,858**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	4.95	99	13.20	264	18.15	363
.20	Vanities and base cabinets.	7	m	38.86	272	426.86	2,988	465.71	3,260
.21	Kitchen wall cabinets.	4	m	40.25	161	236.00	944	276.25	1,105
	SUB-TOTAL: FITTINGS	**$31.31**	**/ m2**		**532**		**4,196**		**4,728**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.67	60	9.44	85	16.11	145
.20	Medicine cabinets.	2	No.	13.00	26	64.00	128	77.00	154
.25	Mirrors.	2	No.	13.00	26	84.00	168	97.00	194
.30	25 mm dia. chrome shower curtain rods.	2	No.	6.00	12	6.00	12	12.00	24
.40	Mail box and house numbers.	1	set	6.00	6	34.00	34	40.00	40
.50	18 mm dia. chrome coat rods.	6	No	6.00	36	6.00	36	12.00	72
	SUB-TOTAL: SPECIALTIES	**$4.17**	**/ m2**		**166**		**463**		**629**
18	**APPLIANCES**								
.10	Range hood	1	No.	22.00	22	98.00	98	120.00	120
	SUB-TOTAL: APPLIANCES	**$0.79**	**/ m2**		**22**		**98**		**120**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,560.00	2,560	3,820.00	3,820	6,380.00	6,380
	SUB-TOTAL: PLUMBING	**$42.25**	**/ m2**		**2,560**		**3,820**		**6,380**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	885.00	885	2,220.00	2,220	3,105.00	3,105
	SUB-TOTAL: HEATING	**$20.56**	**/ m2**		**885**		**2,220**		**3,105**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **RED DEER**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,100.00	1,100	1,780.00	1,780	2,880.00	2,880
	SUB-TOTAL: ELECTRICAL	**$25.70**	**/ m2**		**1,100**		**2,780**		**3,880**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - RED DEER	**$552.99**	**/ m2**		**24,445**		**59,056**		**83,501**

DETAILED COST ESTIMATES FOR FORT McMURRAY

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
1	**EXCAVATION**								
.10	Excavate for basement, wall footings, bases.	297	m3	0.81	240	1.21	360	2.02	600
.11	Excavate trench for garage grade beam.	4	m3	6.25	25	15.00	60	21.25	85
.20	Backfill to basement walls, footings, and grade beams.	74	m3	1.30	96	2.30	170	3.59	266
.30	150mm gravel or sand bed under slab on grade.	25	m3	4.40	110	22.40	560	26.80	670
.40	4 mil polyethylene vapour barrier on gravel or sand bed.	164	m2	1.04	170	0.37	60	1.40	230
.50	Remove surplus excavated material from site.	223	m3	0.00	0	5.61	1,250	5.61	1,250
	SUB-TOTAL: EXCAVATION	**$20.54**	**/ m2**		**641**		**2,460**		**3,101**
2	**CONCRETE**								
.10	20 MPa concrete in footings, bases and basement walls (material only), 200mm reinforced concrete wall, 200x450mm reinforced concrete footing.	19	m3	0.00	0	128.53	2,442	128.53	2,442
.15	20 MPa concrete in grade beams.	1	m3	0.00	0	130.00	130	130.00	130
.16	300 dia. reinforced concrete piles. - 2.00m deep 8 No. - 1.50m deep 5 No. - 1.22m deep 8 No.	21	No.	16.71	351	47.05	988	63.76	1,339

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.20	Reinforcing steel in footings and basement walls (material only).	261	kg	0.00	0	0.93	244	0.93	244
.21	Reinforcing steel in grade beams.	36	kg	0.00	0	0.94	34	0.94	34
.25	6x6 WWM in garage slab, driveway, and sidewalk.	74	m2	0.00	0	1.43	106	1.43	106
.30	Form, place rebar and pour concrete in footing, bases and basement walls including placing floor joists (subcontract).	40	m	31.50	1,260	16.50	660	48.00	1,920
.35	Form place rebar and pour concrete in interior footing and garage grade beam including driveway and sidewalk edge form (subcontract).	26	m	11.15	290	6.69	174	17.85	464
.40	75 mm concrete (20 MPa) in slab on grade.	90	m2	3.98	358	9.51	856	13.49	1,214
.45	100 mm concrete (25 MPa) in garage, driveway, and sidewalk slab on grade.	74	m2	5.08	376	13.32	986	18.41	1,362
.50	Precast concrete steps with supports, 3 risers, supporting brackets (size 1.68 x 1.50 x 0.6 m).	1	No.	60.00	60	285.00	285	345.00	345
.60	Parging to concrete walls.	10	m2	11.20	112	5.60	56	16.80	168

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
2	**CONCRETE - contd.**								
.70	Install fireplace in family room including dual metal construction extensions and elbows, cap, hearth, finishing brickwork to hearth and full height of wall by 2.4 m wide including laminated cedar mantle.	1	No.	742.00	742	1,980.00	1,980	2,722.00	2,722
	SUB-TOTAL: CONCRETE	**$82.72**	**/ m2**		**3,549**		**8,941**		**12,490**
3	**DAMPPROOFING**								
.10	Two coats asphaltic emulsion on concrete walls.	127	m2	0.58	74	1.02	130	1.61	204
.20	100 mm perforated plastic weeping tile in crushed gravel surround.	45	m	5.47	246	1.91	86	7.38	332
	SUB-TOTAL: DAMPPROOFING	**$3.55**	**/ m2**		**320**		**216**		**536**
4	**SIDING**								
.10	100 mm vinyl siding including building paper.	149	m2	7.89	1,175	15.23	2,270	23.12	3,445
.20	Prefinished perforated aluminum soffit.	44	m2	6.95	306	11.27	496	18.23	802
.30	Prefinished aluminum fascia.	70	m	1.26	88	2.89	202	4.14	290
.40	Brick facing to front elevation.	20	m2	55.40	1,108	48.80	976	104.20	2,084
	SUB-TOTAL: SIDING	**$43.85**	**/ m2**		**2,677**		**3,944**		**6,621**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
5	**ROOFING**								
.10	Asphalt shingles, mineral granular surfaced 10.27 kg/m2 (210 lb/100 SF) and flashing.	180	m2	2.76	496	5.04	908	7.80	1,404
.20	Eavestrough and downspouts, aluminum prefinished fittings.	100	m	1.96	196	4.88	488	6.84	684
	SUB-TOTAL: ROOFING	**$13.83**	**/ m2**		**692**		**1,396**		**2,088**
6	**CARPENTRY (ROUGH)**								
.10	Material Only - Framing No. 2 grade spruce or better exterior wall (38 x 140 mm), wallplate interior stud wall (38 x 89 mm), floor joists (38x 235 mm) with (38 x38 mm) cross strapping and (38 x 89 mm) strapping to basement wall (full height).	8.4	MFBM	0.00	0	450.95	3,788	450.95	3,788
.20	Material Only - Engineered trusses at 600 mm o.c., 38 x 89 No. 2 [illegible]e fir or better.	2.4	MFBM	0.00	0	650.00	1,560	650.00	1,560
.30	Material Only - Plywood sheathing 10 mm subfloor underlay 21 m2 16 mm subfloor 151 m2 10 mm roof sheathing, ext. grade 180 m2	352	m2	0.00	0	10.70	3,768	10.70	3,768
.35	Material only - 8 mm OSB wall sheathing.	169	m2	0.00	0	7.57	1,280	7.57	1,280
.40	Labour Only - complete house framing including trusses and window installation.	151	m2	31.94	4,823	0.00	0	31.94	4,823

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
6	**CARPENTRY (ROUGH) - contd.**								
.50	Batt insulation RSI-1.409(RB) 64 mm thick x 300 mm wide at rim joist.	56	m	0.54	30	0.98	55	1.52	85
.60	Teleposts - 73 mm x 1.0 m long including 6.35 mm steel plate.	2	No.	9.00	18	19.50	39	28.50	57
.70	Framing cedar deck 14 m2 including 702bf of material, 16m of handrail and balustrade 1.2m high, and support posts.	1	No.	550.00	550	450.00	625	1,175.00	1,175
	SUB-TOTAL: CARPENTRY (ROUGH)	**$109.51**	**/ m2**		**5,421**		**11,115**		**16,536**
7	**CARPENTRY (FINISH)**								
.10	Stair - 6 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 5m 6.4 mm fir plywood in risers 6m	1	No.	99.00	99	75.00	75	174.00	174
.11	Stair - 8 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 7m 6.4 mm fir plywood in risers 8m	1	No.	105.00	105	90.00	90	195.00	195
.15	Stair - 9 risers 38 x 235 mm stringers 4m 38 x 235 mm treads 8m 6.4 mm fir plywood in risers 9m	1	No.	108.00	108	104.00	104	212.00	212
.20	Select grade fir/hemlock in handrail 50 mm diameter c/w brackets.	4	m	6.00	24	9.50	38	15.50	62

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
7	**CARPENTRY (FINISH) - contd.**								
.25	Hemlock wood railing c/w spindles, railing shoe, and newel posts.	2	m	91.00	182	145.00	290	236.00	472
.30	Select grade fir/hemlock in window and door trim, and base (62 x 12 mm). - windows 44m - doors 144m - base 173m	361	m	1.75	630	1.42	512	3.16	1,142
.40	Attic access hatch - 610 x 610 mm 1 No. - 762 x 510 mm 1 No.	2	No.	33.00	66	48.00	96	81.00	162
	SUB-TOTAL: CARPENTRY (FINISH)	**$16.02**	**/ m2**		**1,214**		**1,205**		**2,419**
8	**WINDOWS AND GLAZING**								
.10	Wood window comprising insulated glass sealed unit, 2.45 x 1.68 m in two panels.	1	No.	0.00	0	626.00	626	626.00	626
.20	Aluminum windows c/w vinyl tracks, insect screens, and prefinished alum. clad fir casings.								
	- 900 x 1250 mm	6	No.	0.00	0	276.67	1,660	276.67	1,660
	- 900 x 1550 mm	2	No.	0.00	0	329.00	658	329.00	658
	SUB-TOTAL: WINDOWS AND GLAZING	**$19.50**	**/ m2**		**0**		**2,944**		**2,944**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
9	**SEALANTS**								
.10	Caulk (exterior) (exterior doors, windows, junction of siding and concrete).	109	m	0.46	50	0.30	33	0.76	83
.20	Caulk (interior) - fibreglass tub/shower unit.	15	m	0.93	14	0.40	6	1.33	20
	SUB-TOTAL: SEALANTS	**$0.68**	**/ m2**		**64**		**39**		**103**
10	**DOORS**								
.10	Exterior - Insulated metal door panel pattern 915x2085x35 mm including paint grade fir frame.	1	No.	32.00	32	325.00	325	357.00	357
.20	Exterior - Insulated, flat slab, metal garage entry door 813x2085x35mm including paint grade fir frame.	1	No.	32.00	32	240.00	240	272.00	272
.30	Exterior - Aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings sized 1800x2085x35mm.	1	No.	76.00	76	1,050.00	1,050	1,126.00	1,126
.40	Exterior - Hemlock/mahogany overhead garage door 4860x2130 mm high raised cladwood sectional including hardware.	1	No.	136.00	136	630.00	630	766.00	766

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
10	**DOORS - contd.**								
.50	Interior - Hollow core door and frame, rotary cut, mahogany face.								
	- 450 x 2080 mm	1	No.	15.00	15	50.00	50	65.00	65
	- 711 x 2080 mm	3	No.	15.00	45	50.00	150	65.00	195
	- 762 x 2080 mm	6	No.	15.00	90	50.00	300	65.00	390
.60	Mahogany faced bi-fold closet doors complete with hardware.								
	- 762 x 2080 mm	1	No.	15.00	15	43.00	43	58.00	58
	- 1220 x 2080 mm	3	No.	15.00	45	74.67	224	89.67	269
	- 1320 x 2080 mm	1	No.	15.00	15	82.00	82	97.00	97
	-1524 x 2080 mm	1	No.	15.00	15	86.00	86	101.00	101
	- 1830 x 2080 mm	1	No.	15.00	15	99.00	99	114.00	114
	SUB-TOTAL: DOORS	**$25.23**	**/ m2**		**531**		**3,279**		**3,810**
11	**HARDWARE**								
.10	Lock sets to exterior doors.	2	sets	18.50	37	47.00	94	65.50	131
.20	Security deadbolt.	1	No.	19.00	19	33.00	33	52.00	52
.30	Latch sets.	7	sets	10.00	70	14.86	104	24.86	174
.40	Bathroom privacy latch sets.	3	sets	10.00	30	17.67	53	27.67	83
.60	Door stops.	11	No.	2.27	25	2.00	22	4.27	47
	SUB-TOTAL: HARDWARE	**$3.23**	**/ m2**		**181**		**306**		**487**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
12	**CERAMIC TILE**								
	NOT APPLICABLE - INCLUDED IN PLUMBING								
13	**WALLBOARD**								
.10	Gypsum wall board (13 mm standard) on walls, ceiling and around stair openings, including corner bead, taped and sanded. - walls 435 m2 - stair openings 18 m2 - ceiling 180 m2	633	m2	3.62	2,290	3.60	2,276	7.21	4,566
.40	Finish to ceiling - textured.	138	m2	2.03	280	1.42	196	3.45	476
.50	Batt insulation RSI - 3.5 (R20) to walls.	170	m2	1.03	175	5.56	945	6.59	1,120
.60	(R40) RSI - 6.94 loose fill glass fibre insulation in attic space.	89	m2	1.55	138	7.47	665	9.02	803
.70	4 Mil polyethylene vapour barrier to external walls and ceiling.	259	m2	0.36	94	0.37	96	0.73	190
.75	2 Mil polyethylene vapour barrier to external walls of basement.	68	m2	0.35	24	0.32	22	0.68	46
.80	Batt insulation RSI - 1.4 (R8) to full height basement walls.	68	m2	0.82	56	2.35	160	3.18	216
	SUB-TOTAL: WALLBOARD	**$49.12**	**/ m2**		**3,057**		**4,360**		**7,417**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
14	**FLOORING**								
.10	Sheet vinyl flooring 2.5 mm (0.100") thick with adhesive to subfloor.	21	m2	6.57	138	14.10	296	20.67	434
.20	32 oz, 100% Nylon carpet with 6 mm (.25") tufted chip foam underlay.	106	m2	4.60	488	27.83	2,950	32.43	3,438
	SUB-TOTAL: FLOORING	**$25.64**	**/ m2**		**626**		**3,246**		**3,872**
15	**PAINTING**								
.10	Exterior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	8	m2	8.75	70	3.25	26	12.00	96
.11	Exterior work - Prepare, prime and paint 4860 x 2130 mm garage door and frame.	1	No.	80.00	80	26.00	26	106.00	106
.15	Interior work - Prepare, prime, two coats of enamel paint on windows, doors, and trim.	21	m2	7.90	166	3.05	64	10.95	230
.20	Interior work - Prepare, prime, two coats of latex or semigloss paint to drywall, etc.	451	m2	2.35	1,060	0.75	340	3.10	1,400
.30	Two coats semigloss on internal doors and frames.	10	No.	28.00	280	6.40	64	34.40	344
.35	Two coats semigloss on bi-fold doors.	7	No.	39.43	276	9.14	64	48.57	340

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
15	**PAINTING - contd.**								
.40	Prepare, prime, one coat semigloss on baseboards and shelving.	193	m	1.01	194	0.33	64	1.34	258
.41	Prepare, prime, one coat semigloss on handrails.	4	m	2.50	10	1.25	5	3.75	15
.42	Prepare, prime, one coat semigloss on balustrade.	2	m	7.50	15	2.50	5	10.00	20
.43	Stain finish to cedar deck.	14	m2	3.57	50	1.29	18	4.86	68
.44	Stain finish to deck handrail and balustrade.	16	m	5.13	82	1.13	18	6.25	100
	SUB-TOTAL: PAINTING	**$19.72**	**/ m2**		**2,283**		**694**		**2,977**
16	**FITTINGS**								
.10	Shelving - Douglas fir plywood, lipped one edge. - 450 mm wide 11 m - 500 mm wide 4 m - 750 mm wide 5 m	20	m	5.30	106	12.80	256	18.10	362
.20	Vanities and base cabinets.	7	m	42.29	296	465.71	3,260	508.00	3,556
.21	Kitchen wall cabinets.	4	m	43.00	172	265.00	1,060	308.00	1,232
	SUB-TOTAL: FITTINGS	**$34.11**	**/ m2**		**574**		**4,576**		**5,150**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
17	**SPECIALTIES**								
.10	Washroom accessories - 3 No. toilet paperholders - 3 No. soap dishes - 3 No. towel bars	9	No.	6.44	58	9.44	85	15.89	143
.20	Medicine cabinets.	2	No.	14.00	28	65.00	130	79.00	158
.25	Mirrors.	2	No.	14.00	28	86.00	172	100.00	200
.30	25 mm dia. chrome shower curtain rods.	2	No.	7.50	15	8.00	16	15.50	31
.40	Mail box and house numbers.	1	set	8.00	8	35.00	35	43.00	43
.50	18 mm dia. chrome coat rods.	6	No.	6.17	37	6.33	38	12.50	75
	SUB-TOTAL: SPECIALTIES	**$4.30**	**/ m2**		**174**		**476**		**650**
18	**APPLIANCES**								
.10	Range hood	1	No.	24.00	24	102.00	102	126.00	126
	SUB-TOTAL: APPLIANCES	**$0.83**	**/ m2**		**24**		**102**		**126**

1990 ALBERTA HOUSE COST COMPARISON STUDY — **OCTOBER 1990**

SINGLE DETACHED DWELLING (4 LEVEL SPLIT) — **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE — **GROSS FLOOR AREA: 151 m2**

Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
19	**PLUMBING**								
.10	Complete plumbing including: - 3 No. water closets - 3 No. lavatory basins - 2 No. fibreglass tub/shower units - 1 No. laundry tub (The above Crane or equal) - 1 No. kitchen sink, compartment, stainless steel. - 1 No. water heater (33.3 Imp. gal. or 152 litres) - John Woods or equal. - rough-in, waste and vent - rough-in, dishwasher - outside hose bibs (Emco or equal)	1	house	2,665.00	2,665	3,980.00	3,980	6,645.00	6,645
	SUB-TOTAL: PLUMBING	**$44.01**	**/ m2**		**2,665**		**3,980**		**6,645**
20	**HEATING**								
.10	Gas-fired, forced air furnace, CSA approved filter, Honeywell wallmount thermostat with heating anticipator and warm-air plenum humidifier, 125 mm (5") diameter fresh-air duct with intake and return air plenum, fifteen 75 mm x 250 mm (3" x 10") Airco supply registers including all ductwork.	1	house	945.00	945	2,460.00	2,460	3,405.00	3,405
	SUB-TOTAL: HEATING	**$22.55**	**/ m2**		**945**		**2,460**		**3,405**

1990 ALBERTA HOUSE COST COMPARISON STUDY **OCTOBER 1990**

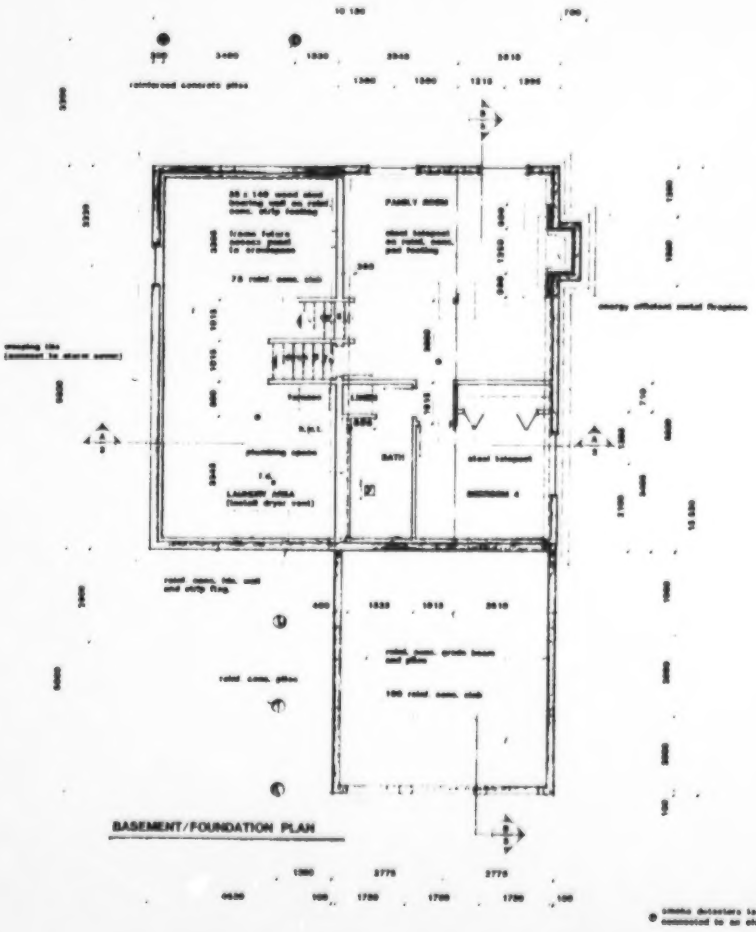
SINGLE DETACHED DWELLING (4 LEVEL SPLIT) **FORT McMURRAY**

CONSTRUCTION COST ESTIMATE **GROSS FLOOR AREA: 151 m2**

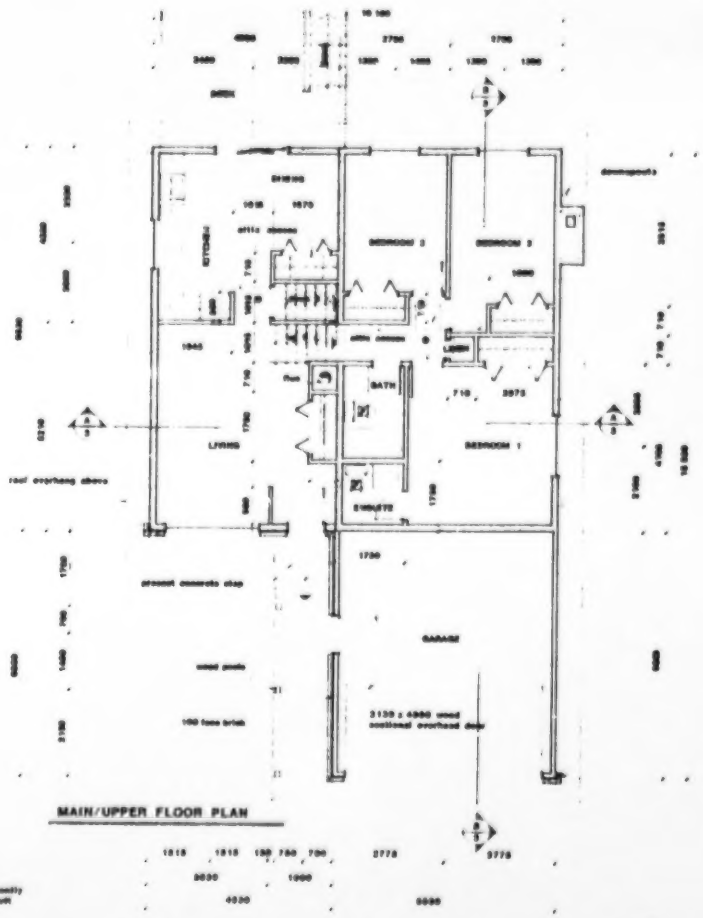
Item	Description	Quantity	Unit	Labour Unit Rate	Labour Item Cost	Mat/Equip Unit Rate	Mat/Equip Item Cost	Total Unit Rate	Total Cost
21	**ELECTRICAL**								
.10	Material only - upgraded lighting fixtures Columbia or equal (Allowance).	1	house	0.00	0	1,000.00	1,000	1,000.00	1,000
.20	Complete electrical installation excluding fixture supply: fixtures, receptacles and connections for TV, phone and razor; vent fans, door bell with two presses, smoke detectors, 100 Amp. - 32 breaker service board, wiring for future garage door opener, roughed-in central vacuum system.	1	house	1,410.00	1,410	2,035.00	2,035	3,445.00	3,445
	SUB-TOTAL: ELECTRICAL	**$29.44**	**/ m2**		**1,410**		**3,035**		**4,445**
22	**SITE OVERHEAD**								
.10	Site Overhead (Allowance).	1	house	0.00	0	5,750.00	5,750	5,750.00	5,750
	SUB-TOTAL: SITE OVERHEAD	**$38.08**	**/ m2**		**0**		**5,750**		**5,750**
	TOTAL COST - FORT McMURRAY	**$606.44**	**/ m2**		**27,048**		**64,524**		**91,572**

APPENDIX

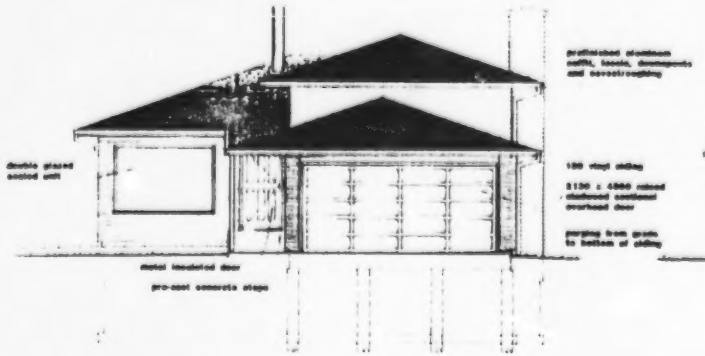
REDUCED DRAWINGS - SINGLE DETACHED HOUSE



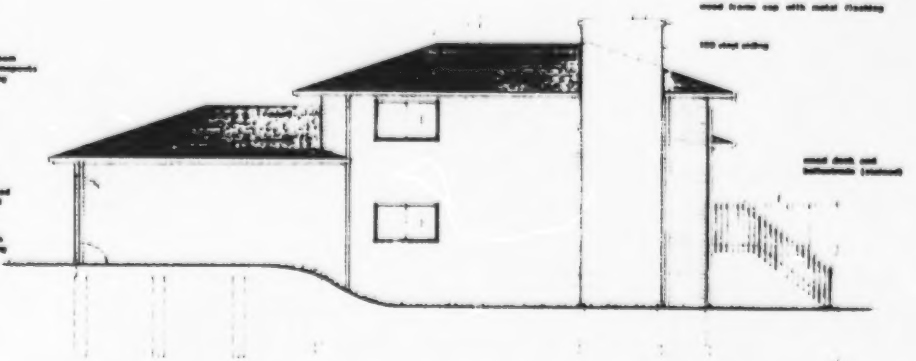
BASEMENT/FOUNDATION PLAN



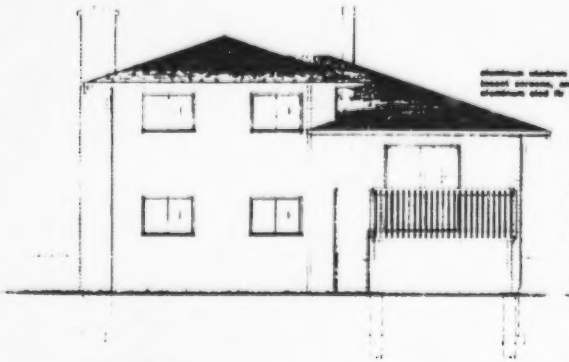
MAIN/UPPER FLOOR PLAN



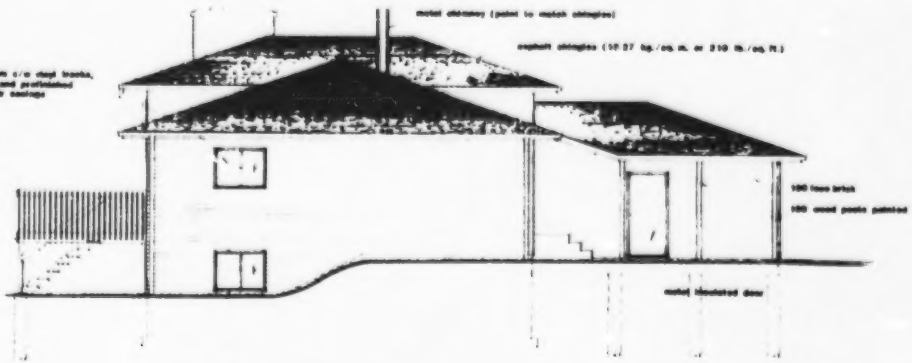
FRONT ELEVATION



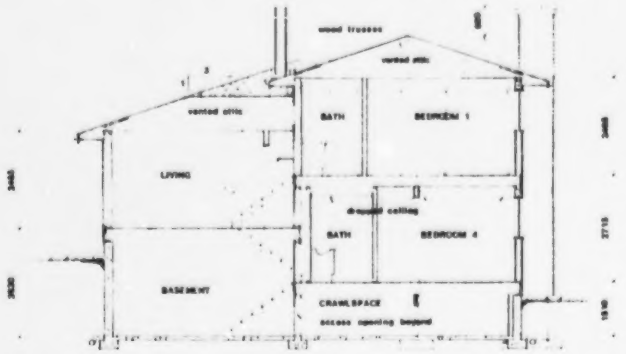
RIGHT SIDE ELEVATION



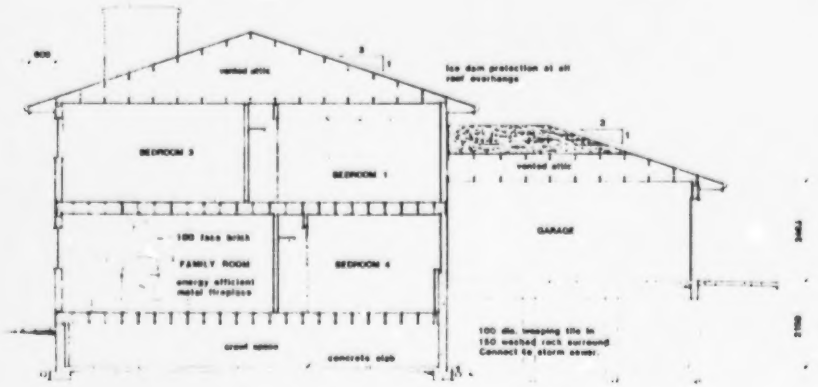
BACK ELEVATION



LEFT SIDE ELEVATION



A A BUILDING CROSS SECTION



B B BUILDING CROSS SECTION

SPECIFICATIONS

FOUNDATIONS

- 20 Mpa, type 50 concrete in 400 x 200 reinforced concrete footings
- 20 Mpa, type 50 concrete in 200mm up concrete foundation walls c/w 4 rows of #10 rebar
- 20 Mpa concrete basement floor slab 75mm thick over 6 mil poly and 150mm compacted sand
- 100mm reinforced garage floor on compacted sand
- 300mm dia. reinforced concrete piles under garage floor and grade beam
- 100mm dia. weeping tile c/w minimum of 150 washed gravel surround
- asphalt emulsion spray applied to interior and exterior of foundation

FRAMING

- floor joists 38 X 235 KD spruce at 400mm o.c. and c/w 38 X 38 cross-bridging
- built up fir beams on adjustable steel posts
- 15mm tongue and groove fir plywood subfloor
- 10mm fir plywood underlay
- exterior walls 38 X 140 KD spruce at 400mm o.c.
- interior partitions 38 X 89 KD spruce at 400mm o.c.
- 8mm "sturdiwood" wall sheathing
- pre-engineered wood roof trusses
- 10mm spruce plywood roof sheathing

INSULATION/VAPOUR BARRIER/DRYWALL

- exterior walls R20 glass fibre batts
- 4mil poly vapour barrier sealed at all joints
- ceilings R40 loose fill glass fibre insulation and 6 mil poly c.b.
- 12mm gypsum wallboard throughout

EXTERIOR FINISHES

(see building elevations on drawing no. 2)

DOORS AND WINDOWS

- metal insulated front door
- 1800 wide aluminum patio door c/w insect screen and prefinished aluminum clad fir frames and casings
- hollow core interior doors (rotary cut mahogany), stained
- mahogany faced bi-fold closet doors
- aluminum windows c/w vinyl tracks, insect screens, and prefinished aluminum clad fir casings
- insulated glass sealed unit in living room window
- 4880 wide X 2130 high raised sectional overhead garage door (painted)

INTERIOR FINISHES

- ceramic tile to bath surround
- texture finish to ceilings
- sheet vinyl flooring to bathrooms, kitchen and dining area
- 32oz., 100% nylon carpet with 6mm chip foam underlay
- paint to walls; latex semi-gloss (washroom, kitchen, dining area)
- upgraded baseboards and trim

FITTINGS

- douglas fir plywood shelving with hardwood edging
- bathroom vanity (solid wood)
- kitchen overhead and base cabinets (solid wood)
- hemlock wood railing c/w spindles, railing shoe, and newel posts

SPECIALTIES

- all washroom accessories including bath also shower
- medicine cabinets
- 25mm dia. metal shower curtain rods
- mailbox and house numbers
- range hood
- energy efficient 810mm fireplace c/w fan
- upgraded hardware throughout

PLUMBING AND HEATING

- stainless steel double kitchen sink
- vanity sinks
- water closets
- fiberglass tub/shower units
- dishwasher rough-in
- 3 piece bath on third level
- washer standpipe
- 3 laundries
- 32 imp. gallon (193 litre) water heater (gas fired)
- gas fired, forced air furnace c/w humidifier

ELECTRICAL

- 200 amp, 32 breaker electrical service
- 220 volt electrical service to dryer and range locations
- valance c/w fluorescent lighting fixture in main bath
- GFI protected plugs in bathrooms
- 2 exterior weatherproof wall plugs
- dishwasher rough-in
- 3 telephone locations
- 3 cable locations
- smoke detectors
- electrical wiring for future garage door opener
- range hood installation
- bathroom fans
- upgraded lighting package
- roughed-in central vacuum system